SL-C24PS

SERVICE MANUAL

West Germany Model

Betamax
AUTO PLAY
PLAY
STOP
PAUSE
PICTURE SEARCH
VIDEO CASSETTE RECORDER SL-C24PS PAL/SECAM
SONY

September, 1983

711B CHASSIS

Refer to separate adjustment manual, part number 9-972-262-81.

SPECIFICATIONS

System

Video recording system	Rotary two-head helical scanning
Video signal	CCIR standards, PAL and DDR SECAM colour
Aerial input	75-ohm, asymmetrical aerial socket
Channel coverage	VHF : Western European channels E2-12 UHF : Western European channels E21-68 (Up to 12 programmes can be preset.)
RF output signal	UHF channels E30 to E39 (variable) 75 ohms, unbalanced

Video

Input	VIDEO IN : BNC connector $1.0\ \mathrm{V}\,^{+1.0}_{-0.5}\ \mathrm{V}$ (p-p) 75 ohms, unbalanced, sync negative
Output	VIDEO OUT : BNC connector 1.0 V (p-p) ±0.1 V (p-p) 75 ohms, unbalanced, sync negative
Horizontal resolution	260 lines
Signal-to-noise ratio	Colour : Better than 40 dB B/W : Better than 43 dB

Audio

Input	AUDIO IN : phono jack 47 kilohms, −10 dBs (0 dBs = 0.775 V rms)
Output	AUDIO OUT : phono jack Load impedance less than 10 kilohms −10 dBs with 47 kilohms load, unbalanced
Frequency response	50 Hz to 10 kHz
Signal-to-noise ratio	40 dB
Audio distortion	Less than 4% at 400 Hz

Tape transport

Tape speed	18.73 mm/sec.
Maximum recording time	2 hours 10 min. (with Sony L-500 cassette) 3 hours 15 min. (with L-750)
Fast forward/rewind time	Within 5 min. (with L-500)

Timer

Clock	Crystal lock
Time indication	24-hour cycle
Timer setting	Only for recording 1 event/week, adjustable for any day or for all 7 days of the week
Power back-up	Back-up duration of 3 minutes minimum at one time

— Continued on next page —

Beta
β VIDEO CASSETTE RECORDER
SONY®

MICROFILM

Consumer VIDEO

General

Power requirements	220 V ac ±10%, 50/60 Hz
Power consumption	38 W
Storage temperature	−20°C to +65°C (−4°F to +149°F)
Operating temperature	5°C to 40°C (41°F to 104°F)
Dimensions	Approx. 430 × 105 × 365 mm (w/h/d) (17 × 4¼ × 14¼ inches) including projecting parts and controls
Weight	Approx. 10 kg (22 lbs 1 oz) net

Accessories supplied

75-ohm coaxial cable for recorder to TV connection	1
RF channel adjustment tool	1

Design and specifications subject to change without notice.

Note

Appliance conforms with EEC Directive 76/889 regarding interference suppression.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

TABLE OF CONTENTS

Section *Title* *Page*

1. GENERAL

1-1. Precautions 3
1-2. Location and Function of Controls 4
1-3. Adjusting the TV 6
1-4. TV Station Presetting 7
1-5. Clock Setting 8
1-6. Auto Play 9
1-7. To Search for A Particular Scene 9
1-8. Use of the Tape Counter 10
1-9. Timer-Activated Recording 11

2. DISASSEMBLY

2-1. Removal of the Case and Front Panel 13
2-2. Removal of the TM Block Ass'y 14
2-3. Removal of Power Block 14
2-4. Removal of FL Cassette Compartment 15
2-5. Removal of Mechanical Chassis Block 15
2-6. Removal of Reel Ass'y 16
2-7. Removal of the YC-25 Board 17
2-8. Removal of the RY-1 Board 17
2-9. Removal of the TU-39 Board 18
2-10. Internal Views 19
2-11. Board Arrangement 20

3. DIAGRAMS

Overall Block Diagram 21
Video Block Diagram 23
Servo Block Diagram 25
System Control Block Diagram 27
System Control Circuit and Mechanism Block Interface 29
System Control Circuit and Timer Circuit Interface 29
System Control Circuit and Function Block Interface 30
System Control Circuit and Its Peripheral Circuit Interface 30
System Control Circuit and Reel Motor Control Circuit Interface 32
System Control Circuit and Video Circuit Interface 32
System Control Circuit and Servo Circuit Interface 33
System Control Circuit and Audio Circuit Interface 33
Capstan Phase System Timing Chart (REC) 35
Capstan Phase System Timing Chart (PB) 36
Capstan Speed System Timing Chart 37
Drum Phase System Timing Chart 37
Drum Speed System Timing Chart 38
PG Signal Timing Chart 38
Audio Block Diagram 39
Audio Level Diagram (REC) 41
Audio Level Diagram (PB) 42
Timer Block Diagram 43
Power Supply Block Diagram 45
Tuner Block Diagram 47
Frame Schematic Diagram 49
YC-25, RY-1, Board 53
SS-16, FU-15, RD-6, RD-7, LM-8, Capstan Motor, Reel Motor, CS-3, CS-4, Board 62
TU-39, AM-3, MT-4 Board 72
PS-22, PS-23, TM-40, TM-41 Board 81
Semiconductors 90
VHF/UHF Tuner Schematic Diagram 92

4. EXPLODED VIEW

1. Front and Cabinet Assemblies 93
2. Tuner, Timer and Power Assemblies 94
3. Front Loading Assembly 95
4. Reel Table Assembly 96
5. Chassis Assembly (1) 97
6. Chassis Assembly (2) 98
7. Drum and S Loading Assemblies 99
8. Hardware List 100
5. ELECTRICAL PARTS LIST 101

SECTION 1
GENERAL

1-1. PRECAUTIONS

On safety

- This unit operates on 220 V ac, 50/60 Hz.
- Should any solid object or liquid fall into the cabinet, turn off the unit and have it checked by qualified personnel before operating it any further.
- To disconnect the mains lead (ac power cord), pull it out by the plug. Never pull the lead itself.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation grille.
- Do not install the unit near heat sources such as radiators or air ducts or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- The unit is designed for operation in a horizontal position. Do not install it in an inclined position.
- Keep the unit and cassette tapes away from equipment with strong magnets, such as a microwave oven, large loudspeakers, etc.

On operation

- When the unit is not to be used for a long period, turn the power off to conserve energy and to extend the useful life of your unit.
- Remove and store video cassettes after recording or playback.

On cleaning

Clean the cabinet, panel and controls with a dry soft cloth. Do not use a moistened cloth or any type of solvent, such as alcohol or benzine, which might damage the finish.

On repacking

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

On colour broadcasting systems

This machine is designed to record and playback using the PAL and DDR SECAM colour standard. Recording and playback of video sources based on other colour systems cannot be guaranteed.

If you have any questions about this unit, contact your Sony dealer.

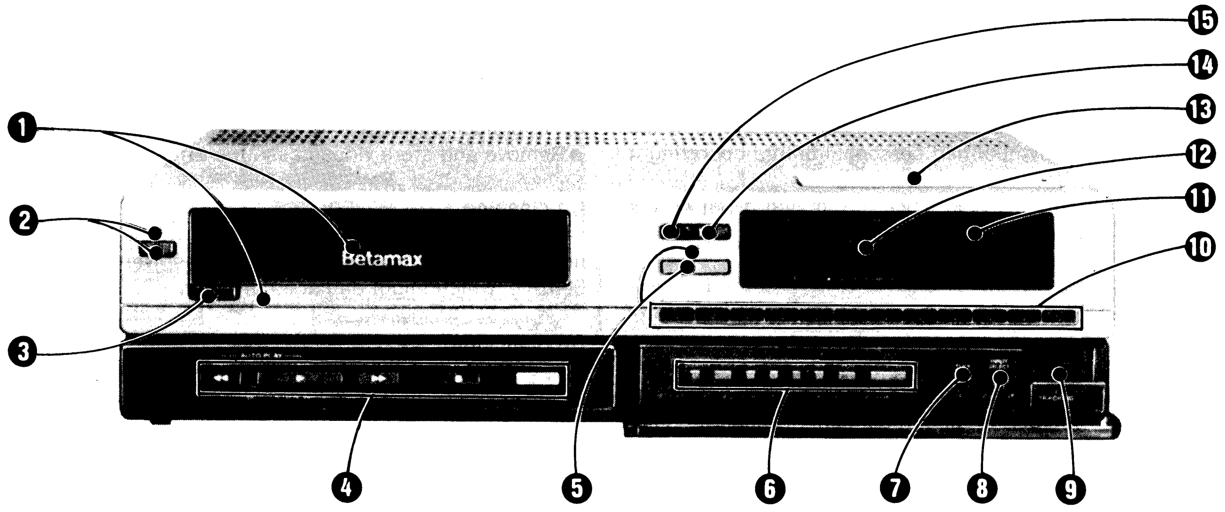
SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.

1-2. LOCATION AND FUNCTION OF CONTROLS

Front



❶ Cassette compartment and CASSETTE INSIDE lamp
Insert a cassette after turning on the recorder. The lamp lights up when a cassette is inside.

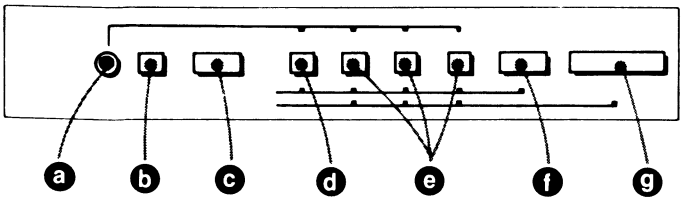
❷ ON/STANDBY button and lamp
Press to turn on the unit. The lamp will light up. Press again to turn it off.
The timer section will continue to operate and the time will be displayed even if the ON/STANDBY button is off so long as the ac power cord is connected to the wall outlet.

❸ EJECT button
Press to remove the cassette. This button does not function when the recorder is turned off.

❹ Function buttons
► PLAY button : Press to play the tape back.
◄◄ REW button : Press to rewind the tape. Used also for the reverse picture search and skip scan operation.
►► FF button : Press to advance the tape rapidly. Also used for the forward picture search and skip scan operation.
■ STOP button : Press to stop the tape.
❚❚ PAUSE button : Press to stop the tape for a moment during recording or playback. A still picture will be seen during playback. Press again to release the pause mode.

❺ REC button and lamp
Press to start recording. The lamp will light up.

❻ Timer setting section (behind the front panel)



ⓐ **CLOCK SET button :** Press to set the clock.
ⓑ **CLEAR button :** Press to clear the timer programme memorized.
ⓒ **TIMER SET button :** Press to set the turn-on/off time of a recording.
ⓓ **DAY button :** Press to set the turn-on day of a recording.
ⓔ **HOUR, 10 MIN and MIN buttons :** Press to set the turn-on/off time of a recording.
ⓕ **PROG button :** Press to select the TV programme to be recorded by the timer.
ⓖ **TIMER REC button :** Press to set the recorder in the timer recording stand-by mode.

❼ TONE select switch (behind the front panel)
Normally set to the H position. Set to L if the sound seems to exaggerate high frequencies during the playback of a tape recorded on another recorder.

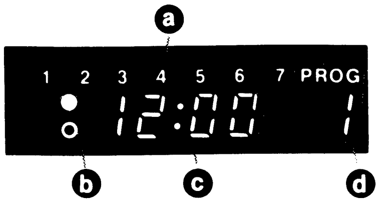
❽ INPUT SELECT switch (behind the front panel)
Select the programme to be recorded.
LINE : for recording signals connected to the VIDEO IN and AUDIO IN jacks
TUNER : for recording TV programmes

❾ TRACKING control (behind the front panel)
If streaks or snow appears during the playback of a tape recorded on another recorder, turn this knob to obtain the best possible picture.

❿ Programme select buttons
Select the number of the programme to be recorded or to be viewed. The selected programme number will appear in the display window.

⓫ TIMER REC lamp
Lights when the TIMER REC button behind the front panel is pressed to set the recorder in the stand-by mode. It remains lit till the timer recording is finished.

⑫ Display window



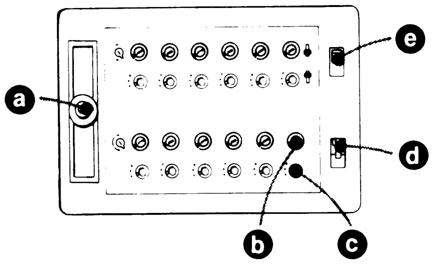
ⓐ **Day of the week indication:** Shows the day of the week on which the timer-activated recording will take place.

ⓑ **Turn-on and turn-off setting indications:** The "●" mark shows you are setting the turn-on time and the "O" mark shows the turn-off time.

ⓒ **Time and counter display:** Usually shows the present time. When the TIMER/COUNTER button is pressed to COUNTER, the display shows the counter number.

ⓓ **Programme number:** Shows the programme number selected with the programme select buttons.
When the INPUT SELECT switch is set to LINE to record signals from the VIDEO IN and AUDIO IN jacks, the indication will change to "AU".

⑬ Tuning compartment



ⓐ **Tuning aid:** Use to select the band and to turn the tuning control. The indication at its end shows the approximate position within the selected band.

ⓑ **Tuning control:** With the supplied tuning aid, turn until the desired station is properly tuned in.

ⓒ **Band-select switch:** Using the supplied tuning aid, set to V_L (channels E2 through E4), V_H (channels E5 through E12), or U (channels E21 through E68) according to the channel to be tuned in.

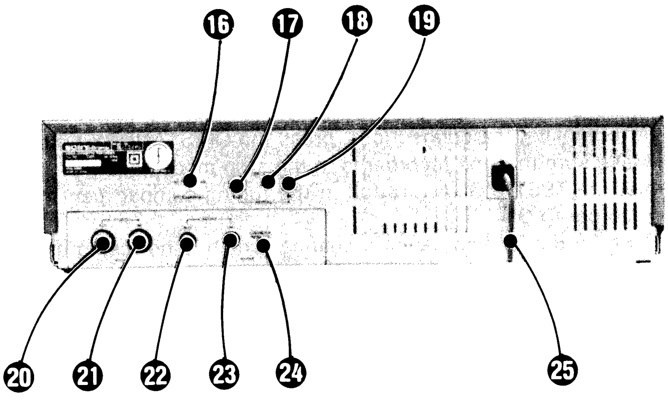
ⓓ **AFT switch:** When the tuning compartment is closed, the automatic fine tuning circuit locks in the signal and maintains a sharp picture.

ⓔ **TEST SIGNAL switch:** Set to ON to obtain a test pattern.

⑭ RESET button
Press to set the tape counter reading to "0000".

⑮ TIMER/COUNTER button
Press to set the display to the tape counter. To reset to clock, press it again.

Rear



⑯ RF CHANNEL screw
If there is interference on the factory preset channel for RF output and the signal of this recorder unit cannot be displayed clearly on the TV screen, adjust this screw with the supplied screwdriver.

⑰ AERIAL OUT socket
Connect the aerial input of the TV receiver using the supplied cable.

⑱ DX/LOCAL switch
Normally set this switch to DX. If the TV signal is very strong, set the switch to LOCAL.

⑲ AERIAL IN socket
Connect the aerial cable.

⑳ VIDEO OUT jack (BNC type)
Connect to the video input of another video cassette recorder or a video monitor.

㉑ VIDEO IN jack (BNC type)
Connect to the video output of a camera, another video cassette recorder, etc.

㉒ AUDIO OUT jack (phono type)
Connect to the audio input of a video monitor or a video cassette recorder.

㉓ AUDIO IN jack (phono type)
Connect to the audio output of a camera or another video cassette recorder.

㉔ CAMERA REMOTE jack (special mini jack)
For camera recording, connect an ac adaptor to this jack.

㉕ AC mains lead

1-3. ADJUSTING THE TV

One of the television channels must be adjusted to receive the signal from the recorder.

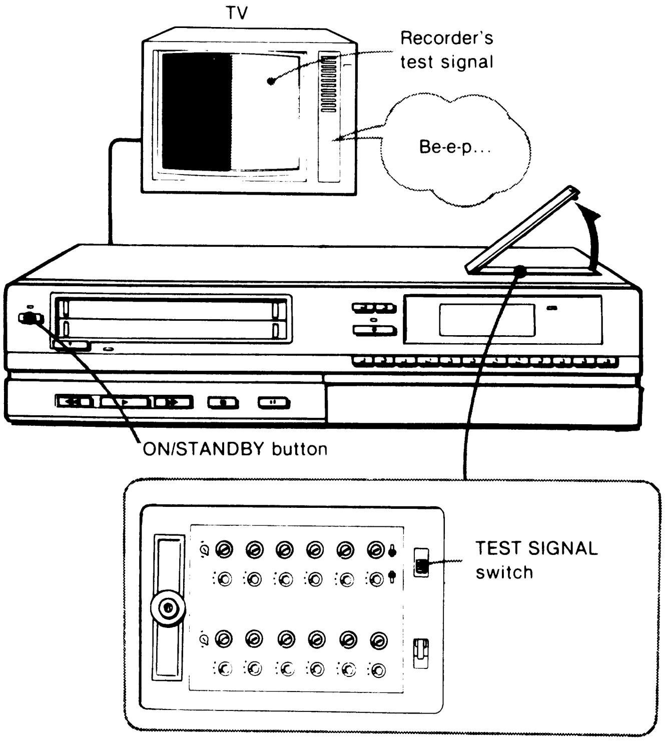
1 After making the connections, press the ON/STANDBY button.
2 Make sure that the recorder is in the stop mode.
3 Set the TEST SIGNAL switch in the tuning compartment of the recorder to ON.
4 Turn on the TV and select a channel which is not being used to receive a TV station. Tune the channel until you see a clear black and white pattern on the TV screen and you hear a continuous tone. This is the recorder's test signal.

- Note that the test signal is transmitted on a channel between UHF channels 30 and 39.

If the test picture is free of disturbance, the TV adjustment is complete. Set the TEST SIGNAL switch to OFF.
If the test picture is not free of disturbance, proceed with the next adjustment.

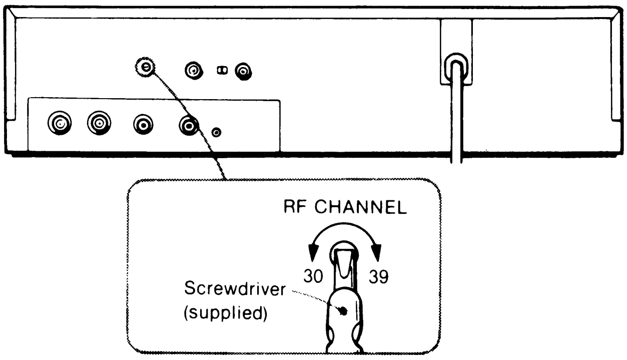
> Whenever you use the video recorder, you should set the TV to the channel selected in this adjustment.

—If you are not sure how to adjust your TV, please refer to the TV's instruction manual or consult your dealer.



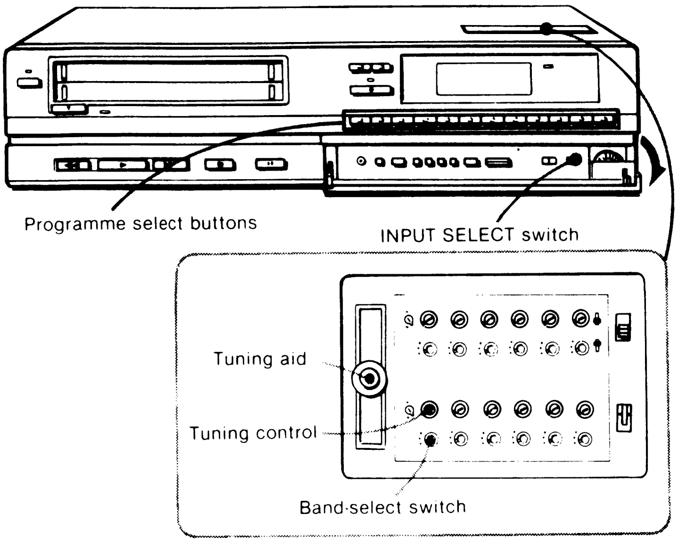
If the test picture is not free of disturbance

1 Reset the TEST SIGNAL switch to OFF.
2 Adjust the channel of the TV to a channel between UHF channels 30 and 39 with the tuning control or the fine tuning control on the TV, so that the TV screen shows no picture and so that a steady rustling sound or no sound is heard.
3 Set the TEST SIGNAL switch to ON again.
4 Slowly turn the RF CHANNEL screw on the back of the recorder with the supplied screwdriver, until you see an undistorted test picture on the TV screen.
5 Now the TV adjustment is complete. Reset the TEST SIGNAL switch to OFF.



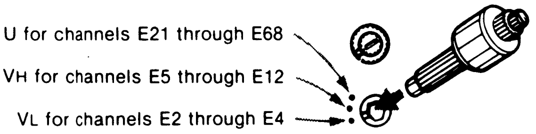
1-4. TV STATION PRESETTING

Once you have tuned your TV to the recorder, the next step is to tune the recorder to all the TV stations that you can receive in your area. Up to 12 TV stations can be preset in any order.

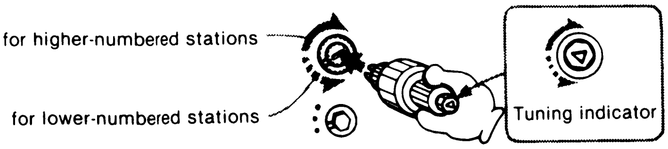

Programme select buttons
INPUT SELECT switch
Tuning aid
Tuning control
Band-select switch

PRESETTING PROCEDURE

1 Set the INPUT SELECT switch to TUNER.
2 Press the programme-select button to be preset.
3 Open the tuning compartment and, using the supplied tuning aid, set the band-select switch corresponding to the selected programme number to one of the three positions :


U for channels E21 through E68
VH for channels E5 through E12
VL for channels E2 through E4

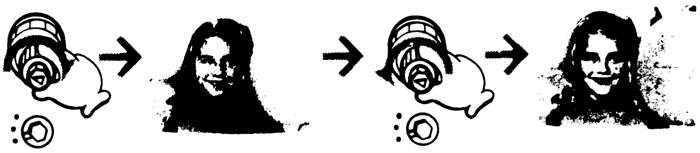
4 Using the other side of the tuning aid, turn the tuning control until the desired station is properly tuned in. The indicator on the top of the tuning aid shows the approximate position in the selected band.


for higher-numbered stations
for lower-numbered stations
Tuning indicator

If you keep turning the tuning control clockwise, you will again get to the lowest-numbered station within that band.

When the picture appears, slowly turn the tuning control to the right until a herringbone pattern appears in the coloured part of the picture, then turn the control back until the picture is perfectly clear.

To identify the stations, consult a newspaper or TV programme guide.



5 Repeat steps 2, 3 and 4 for all the other stations.
6 Close the tuning compartment.
AFT (automatic fine tuning) circuit then locks in the signal and maintains a sharp picture.

After presetting the TV stations, you can use the programme select buttons of the recorder to tune in a station for viewing as well as recording.

1-5. CLOCK SETTING

When you connect the mains lead to a wall outlet, the clock indicates "0 : 00" with the two dots blinking.

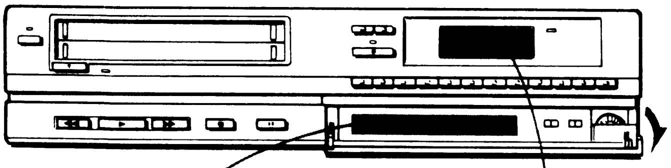
Example : To set the clock to 7 : 35 p.m. (19 : 35) on Tuesday*

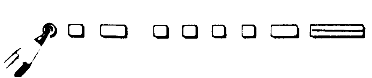
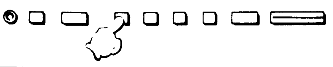
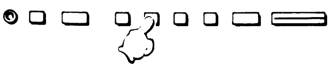
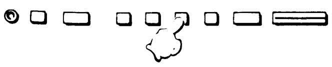
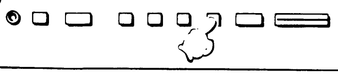
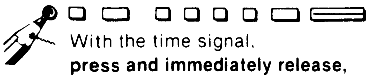
*** Time indication**

AM				PM					
12:00 (midnight)	1:00		11:00	12:00 (noon)	1:00	2:00		10:00	11:00
↓ 0:00	↓ 1:00	.....	↓ 11:00	↓ 12:00	↓ 13:00	↓ 14:00	.....	↓ 22:00	↓ 23:00

Day indication

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
↓ 1	↓ 2	↓ 3	↓ 4	↓ 5	↓ 6	↓ 7



1 CLOCK SET SET/START 	0:00
2 DAY 	0:00
3 HOUR 	19:00
4 10 MIN 	19:30
5 MIN 	19:35
6 CLOCK SET SET/START  With the time signal, **press and immediately release, otherwise the clock will not start operating.** If you press the CLOCK SET button for more than a second, clock adjustment will be required again.	19:35 The upper dot blinks for the first half of each minute, and the lower dot for the second half.

Zero second adjustment

Press the CLOCK SET button quickly (less than a second).

While the upper dot is blinking, the clock is set to the time displayed 00 second. For example, if the clock time is 7 : 30, 20 seconds, it is set to 7 : 30, 00 second.

While the lower dot is blinking, the clock advances one minute and is set to the time displayed 00 second. For example, if the clock time is 7 : 30, 40 seconds, it is set to 7 : 31, 00 second.

> If you press the CLOCK SET button for more than a second, "0 : 00" blinks to show that the clock adjustment is required again.

When power has been interrupted for more than 3 minutes, the time indication "0 : 00" blinks, showing that the clock must be reset.

If power has been interrupted for less than 3 minutes, the displayed time remains correct.

The DAY, HOUR, 10 MIN and MIN buttons can be pressed in two ways :

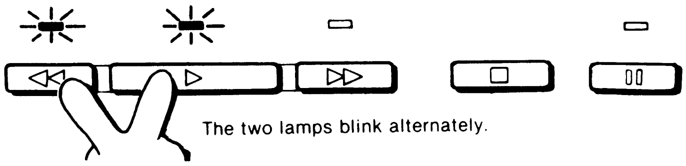
When you hold a button down, the digits will advance continuously until the button is released.

When you press and immediately release a button, the digits will advance by one.

1-6. AUTO PLAY

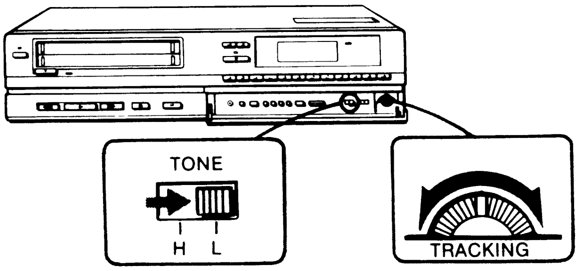
To playback from the beginning of the tape after rewinding

Press the ▶ PLAY button and ◀◀ REW button simultaneously in the stop mode. The lamps above these buttons blink alternately during rewinding.
After the tape is completely rewound, it will be automatically played back.



When playing back a tape recorded on another machine

If streaks or snow appears, adjust the TRACKING control for the best possible picture.
Return the control to the centre position after playing back the tape.



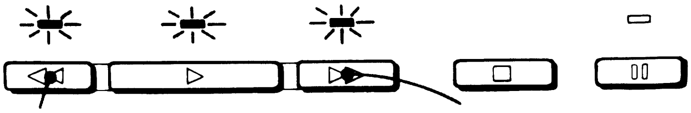
If the playback sound seems to have exaggerated high frequencies, set the TONE selector to L. Return the selector to the normal H position after playing back the tape.

1-7. TO SEARCH FOR A PARTICULAR SCENE

TO SEARCH FOR A PARTICULAR SCENE

Picture search

During playback



Keep ◀◀ pressed for high-speed reverse picture.

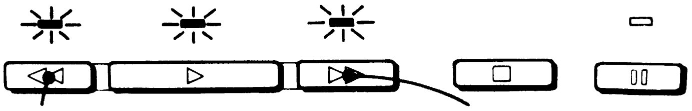
Keep ▶▶ pressed for high-speed forward picture.

Release the button at the desired point.
Normal playback will resume.

The picture search mode can also be started directly from the pause mode.

Skip Scan

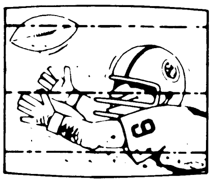
During rewind or fast forward mode



When rewinding the tape, keep ◀◀ pressed for high-speed reverse picture.

When rapidly advancing the tape, keep ▶▶ pressed for high-speed forward picture.

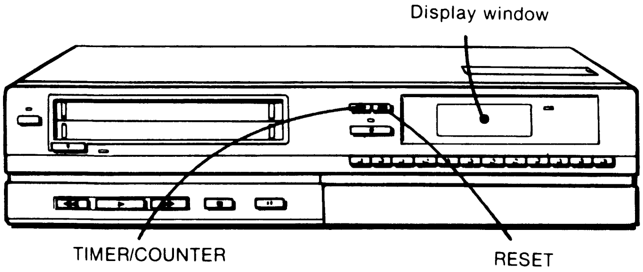
Release the button at the desired point.
The normal rewind or fast forward mode will resume.



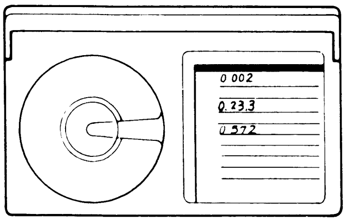
Streaks will appear during the picture search, the skip scan and the pause modes.

1-8. USE OF THE TAPE COUNTER

Turn on the power and press the TIMER/COUNTER button to display the counter reading in the display window.
To return the display to the present time, press the TIMER/COUNTER button again.



Before starting recording or playback, press the RESET button to set the counter to "0000".
By noting the counter reading at the desired point, you can easily find that point later by referring to the counter.



Write the counter readings you want to remember on the label of the cassette.

Normal rewinding will stop at the tape counter's "0000" position. To rewind the tape further, press the ◀◀ button again.
With automatic rewinding from the tape end or for "auto play", the tape will not stop at the counter's "0000" position.

Notes

- The counter reading is automatically reset to zero when a cassette is newly inserted.
- While the power is off, the display shows the present time, regardless of the TIMER/COUNTER setting.
- The counter reading will be retained in the memory even after the power is turned off, as long as the cassette is in the cassette compartment.
- The tape counter does not operate when a blank, unrecorded tape is played.

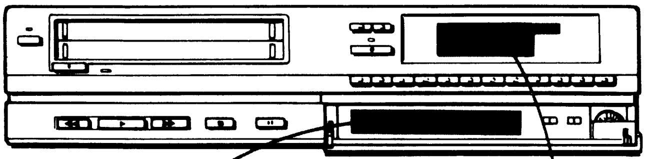
1-9. TIMER–ACTIVATED RECORDING

You can make one recording within 7 days even when you are not at home.

Check before setting the timer
- Is the clock set to the correct day and correct time?
Timer setting can only be made after the clock has been set.
- Is a cassette inserted in the recorder?
- Is the cassette long enough to record the programmes?
- Does the cassette have a safety tab on the bottom?
- Is the INPUT SELECT switch set to TUNER?

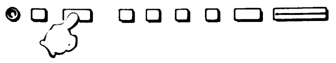
Note: The timer cannot be set during recording, playback, or when the INPUT SELECT switch is set to LINE (The "AU" appears on the display window.).

Example: To record a PROG 2 broadcast from 9 : 00 a.m. to 11 : 25 a.m. on Friday.



1 **Button to be pressed.**

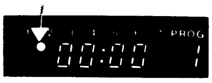
TIMER SET



If the recorder is off, it will be turned on automatically.

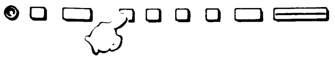
Time display
The segment to be set will blink.

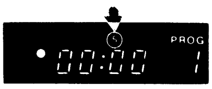
Turn-on indication



2 Select the turn-on day.

DAY



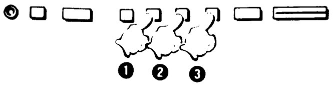


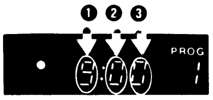
Indication changes as follows :

1234567 (everyday) → 1 (Monday) → 2 (Tuesday)... → 7 (Sunday)

3 Set the turn-on time.

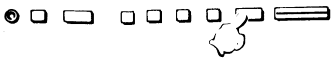
HOUR 10MIN MIN

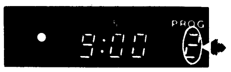




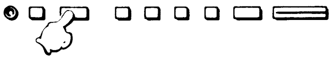
4 Select the programme to be recorded.

PROG

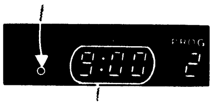




5 TIMER SET



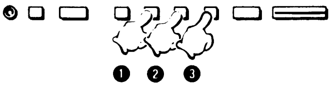
Turn-off indication

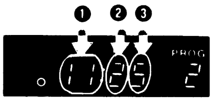


Blinks.

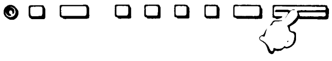
6 Set the turn-off time.

HOUR 10 MIN MIN

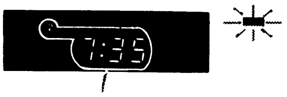




7 TIMER REC



TIMER REC



Present day and time

TIMER REC lamp lights up and the power is turned off.
At the preset turn-on time, recording will start automatically and will stop at the preset turn-off time.

If the inserted cassette is at its end or does not have the safety tab, the cassette will be automatically ejected.

ONCE THE TIMER REC LAMP HAS LIT UP, NO FUNCTION OF THE RECORDER CAN BE ACTIVATED, except for checking the timer setting.
To operate the recorder after setting the timer for recording, press the TIMER REC button so that the TIMER REC lamp goes off. To reactivate the timer recording standby mode, be sure to press the TIMER REC button again.

To record to the end of the tape

Set the turn-off time to a time after the tape will reach its end.

If the tape reaches the end during the timer recording

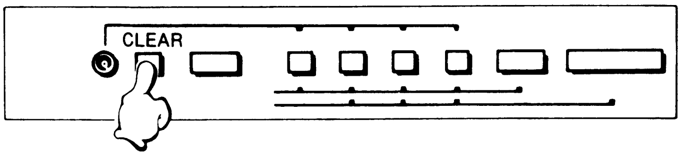
The recording will stop and the tape will be rewound to the beginning. Then after about a second, the recorder will be turned off.

To stop the on-going timer recording

Press the TIMER REC button so that the TIMER REC lamp goes off. The unit will be turned off automatically after about a second.

To erase the setting

1. Press TIMER SET button to display the setting of the timer.
2. Press CLEAR button. The memory of the timer will be erased.



When a power interruption occurs before or during timer recording

If a power interruption of more than 3 minutes has occurred,
The time indication "0 : 00" will blink. This means that the memory of the timer has been completely erased. Set the clock and the timer again. In this case, the recording which had been in process will not resume.

If, after a power interruption, the clock still shows the correct time with the two dots blinking,
it means that the interruption was less than 3 minutes.
In this case, the memory of the timer is retained and recording will be made. All you have to do is press any one of the buttons in the timer-setting compartment to stop the blinking. The recording which had been in process before the interruption will resume.

TO CHECK THE TIMER SETTING

Press the TIMER SET button. Each time you press the button, the indication will change as follows:

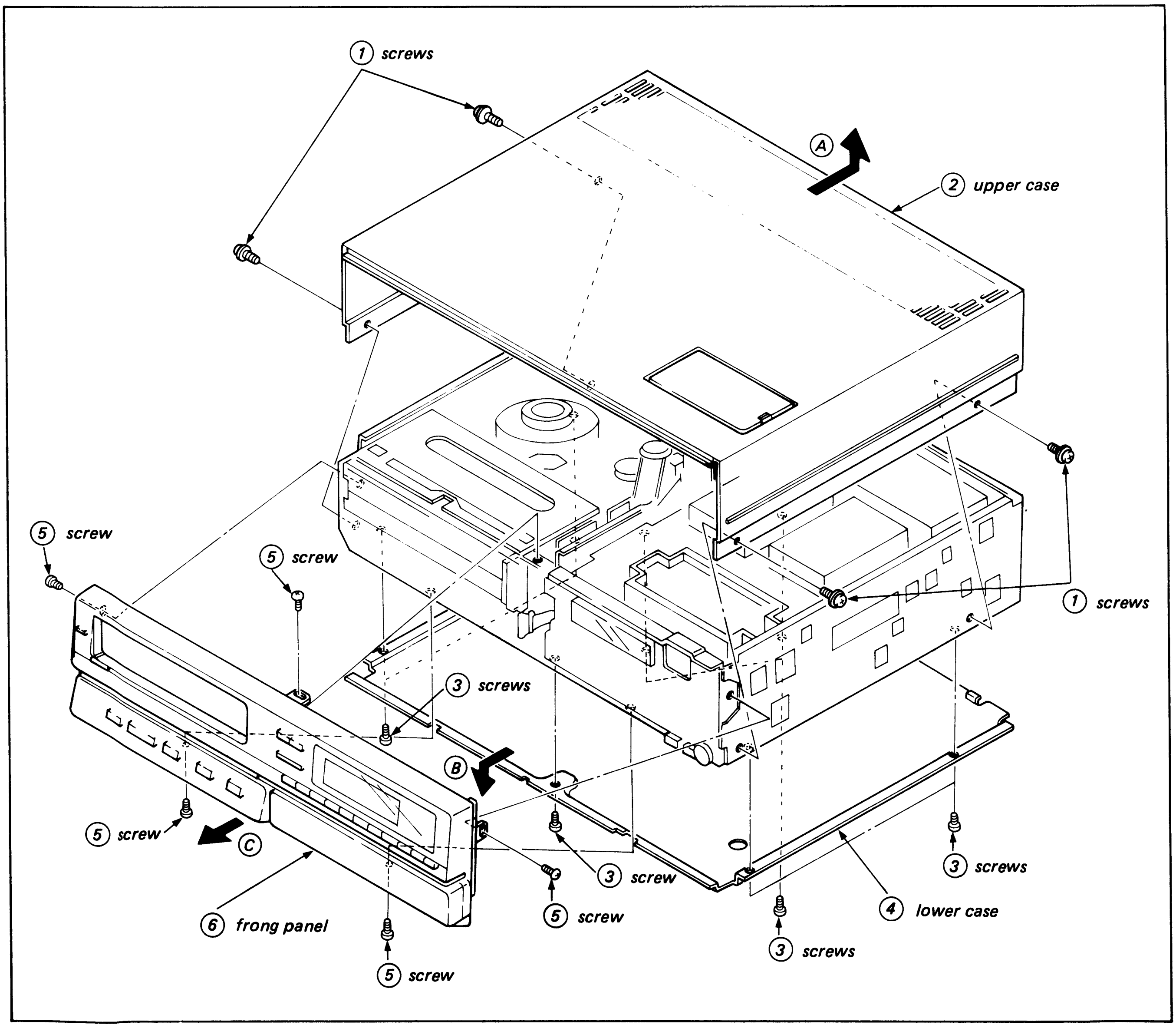
Turn-on day and time
↓
Turn-off day and time
↓
Present time

During actual timer recording, only the turn-off time can be checked.

SECTION 2
DISASSEMBLY

2-1. REMOVAL OF THE CASE AND FRONT PANEL

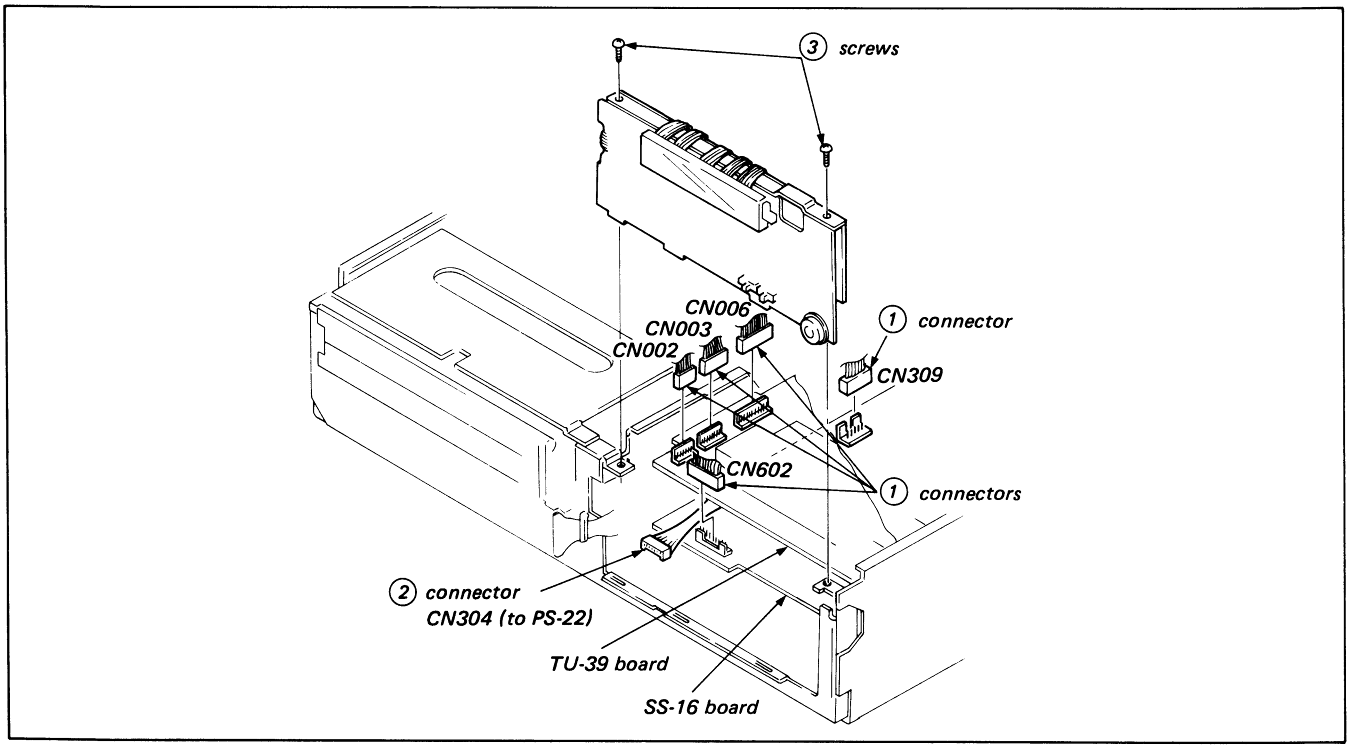
1) Remove the four screws ①.
2) Remove the upper case ② in the direction shown by the arrow Ⓐ.
3) Remove the seven screws ③ and the lower case ④ in the direction shown by the arrow Ⓑ.
4) Remove the five screws ⑤ and the front panel ⑥ in the direction shown by the arrow Ⓒ.



① screws
Ⓐ
② upper case
⑤ screw
⑤ screw
① screws
③ screws
Ⓑ
⑤ screw
Ⓒ
③ screw
③ screws
⑥ frong panel
⑤ screw
④ lower case
③ screws
⑤ screw

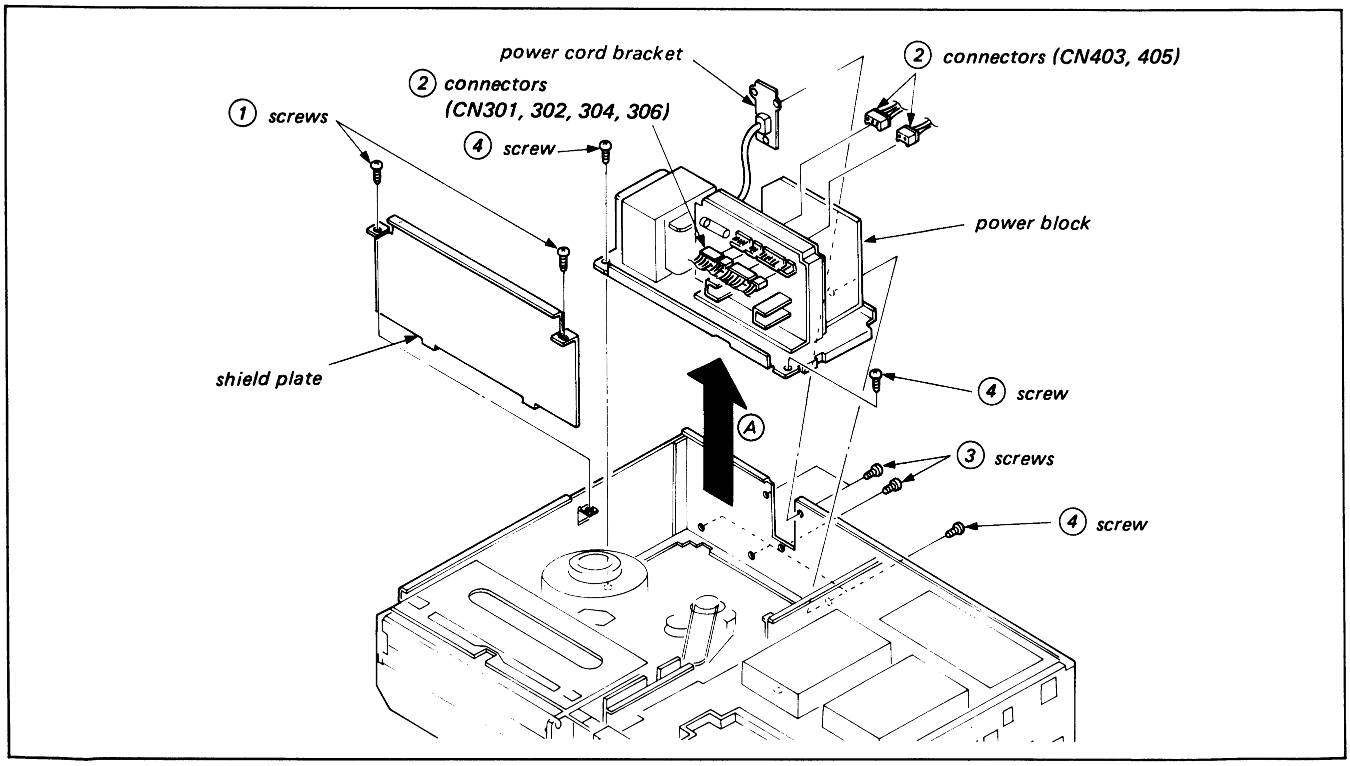
2-2. REMOVAL OF THE TM BLOCK ASS'Y

1) Pull out the five connectors ①.
2) Pull out the connector ②.
3) Remove the two screws ③ and the TM-block Ass'y.


③ screws
CN006
CN003
CN002
① connector
CN309
CN602
① connectors
② connector
CN304 (to PS-22)
TU-39 board
SS-16 board

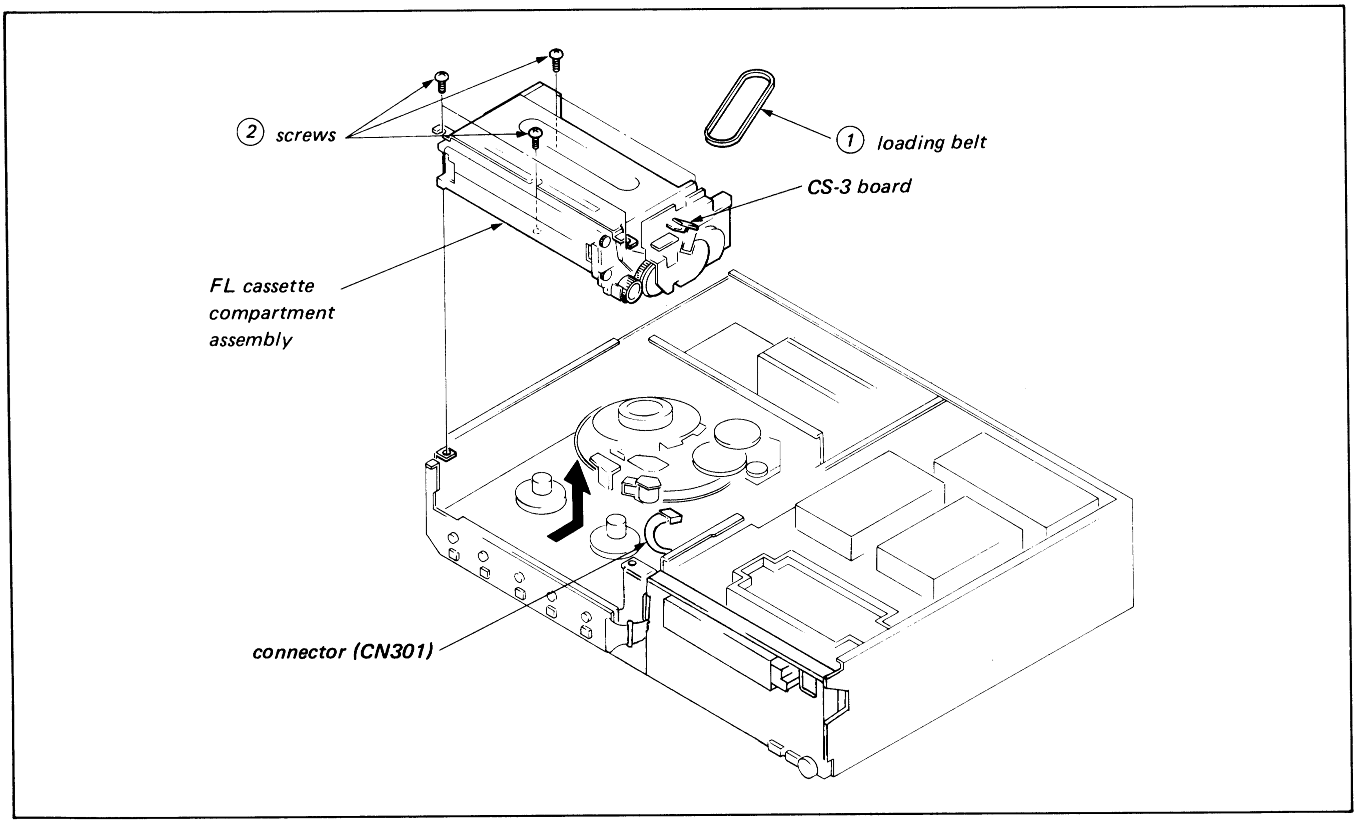
2-3. REMOVAL OF POWER BLOCK

1) Remove the two screws ①, and the shield plate.
2) Pull out the six connectors ②, (CN301, 302, 304, 306, 403, 405) power block side.
3) Remove the three screws ③ and the power cord bracket.
4) Remove the five screws ④, holding the power block.
5) Remove the power block in the direction shown by the arrow Ⓐ.


power cord bracket
② connectors
(CN301, 302, 304, 306)
① screws
④ screw
② connectors (CN403, 405)
power block
shield plate
④ screw
Ⓐ
③ screws
④ screw

2-4. REMOVAL OF FL CASSETTE COMPARTMENT ASSEMBLY

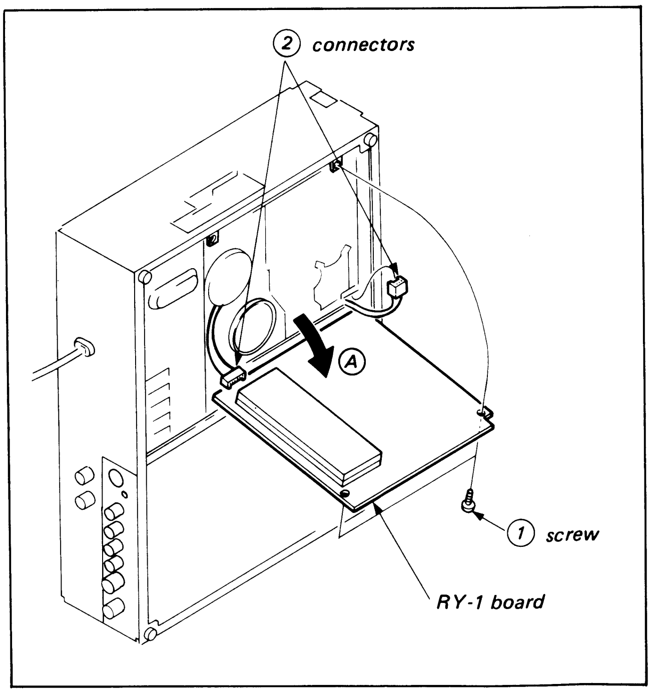
1) Loosen the loading belt ① exerting a force on the threading motor.
2) Remove the five mounting screws ② of the FL cassette compartment.
3) Pull out the exposed connector from the CS-3 board (CN301) on the FL cassette compartment.
4) Lift the FL cassette compartment assembly in the direction shown by the arrow to remove.


② screws
① loading belt
CS-3 board
FL cassette compartment assembly
connector (CN301)

2-5. REMOVAL OF MECHANICAL CHASSIS BLOCK

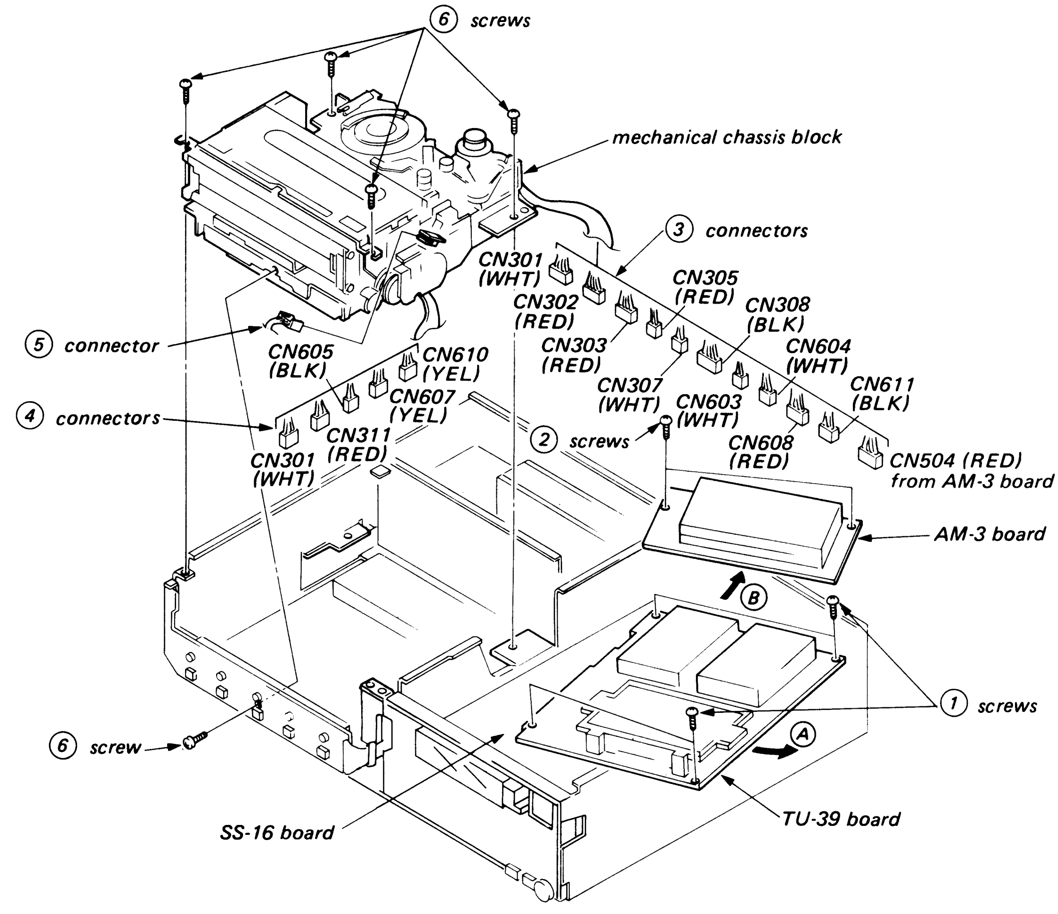
(1)

1) Stand the set with the right side panel on the bottom.
2) Remove the two screws ①, holding the RY-1 board.
3) Pull out the two connectors ②.
4) Remove the RY-1 board in the direction shown by the arrow Ⓐ.


② connectors
Ⓐ
① screw
RY-1 board

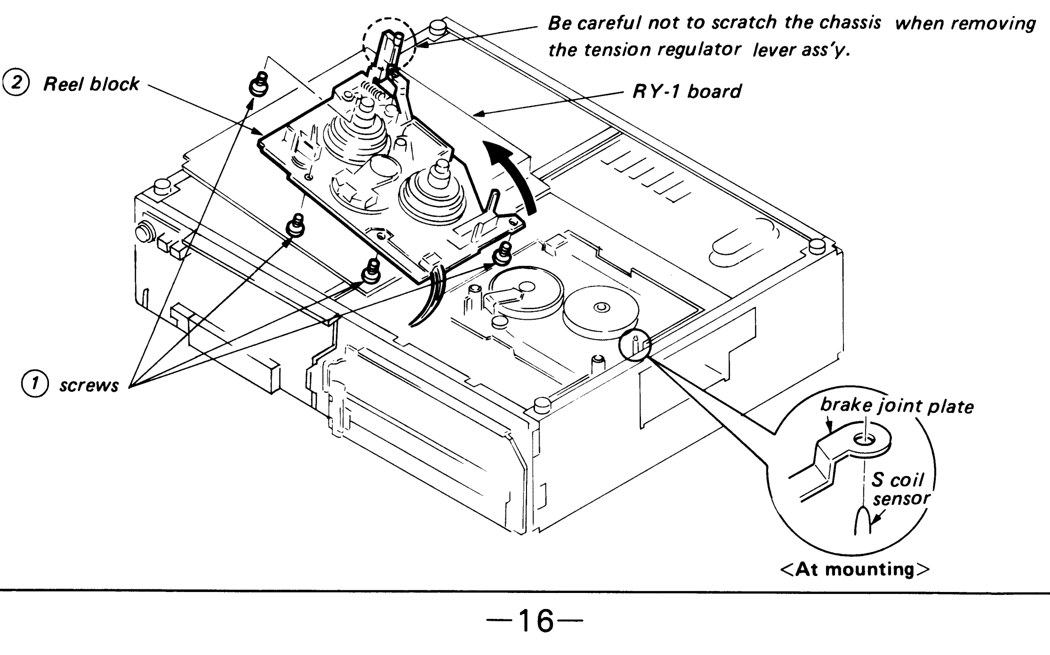
(2)

1) Remove the four screws ① and the TU-39 board in the direction shown by the arrow Ⓐ.
2) Remove the two screws ② and the AM-3 board in the direction shown by the arrow Ⓑ.
3) Pull out the ten connectors ③ from the SS-16 board and pull out the rest one from AM-3 board.
4) Pull out the five connectors ④ from the SS-16 board and pull out the connector ⑤.
5) Remove the five screws ⑥ and the mechanical chassis block.


⑥ screws
mechanical chassis block
③ connectors
CN301 (WHT)
CN302 (RED)
CN303 (RED)
CN305 (RED)
CN308 (BLK)
CN604 (WHT)
CN307 (WHT)
CN603 (WHT)
CN611 (BLK)
CN608 (RED)
CN504 (RED) from AM-3 board
⑤ connector
CN605 (BLK)
CN610 (YEL)
CN607 (YEL)
④ connectors
CN311 (RED)
CN301 (WHT)
② screws
AM-3 board
Ⓑ
① screws
Ⓐ
⑥ screw
SS-16 board
TU-39 board

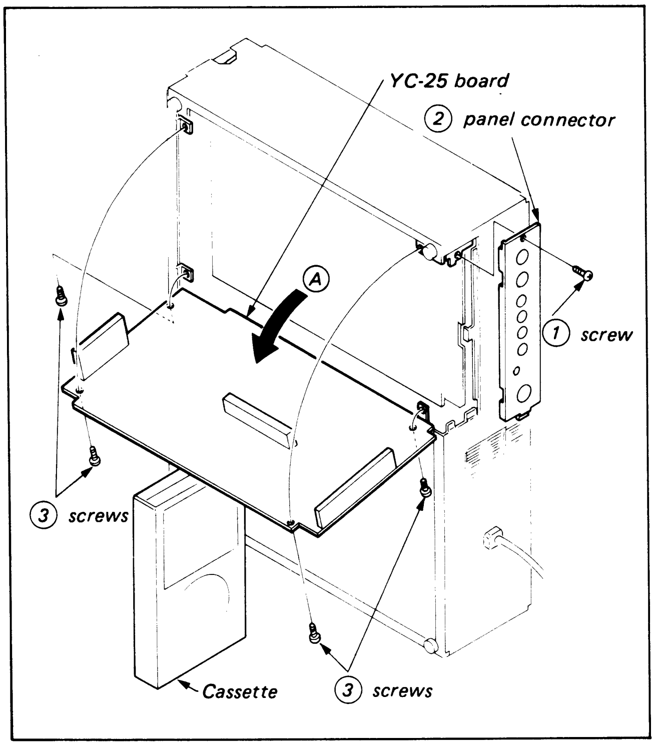
2-6. REMOVAL OF REEL ASS'Y

1) Place the set up side down.
2) Remove the four screws ① .
3) Remove the reel block ②.


Be careful not to scratch the chassis when removing the tension regulator lever ass'y.
② Reel block
RY-1 board
① screws
brake joint plate
S coil sensor
<At mounting>

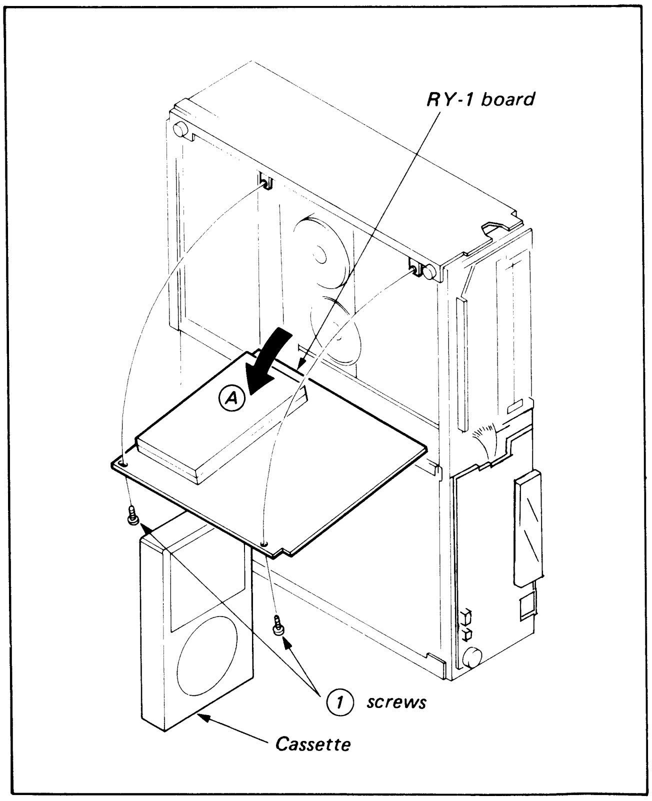
2-7. REMOVAL OF THE YC-25 BOARD

1) Stand the set with the power source side on the bottom.
2) Remove the screw ① and the panel connector ②.
3) Remove the four screws ③, holding the YC-25 board.
4) Swing open the YC-25 board in the direction shown by the arrow Ⓐ and rest it on a cassette.


YC-25 board
② panel connector
Ⓐ
① screw
③ screws
Cassette
③ screws

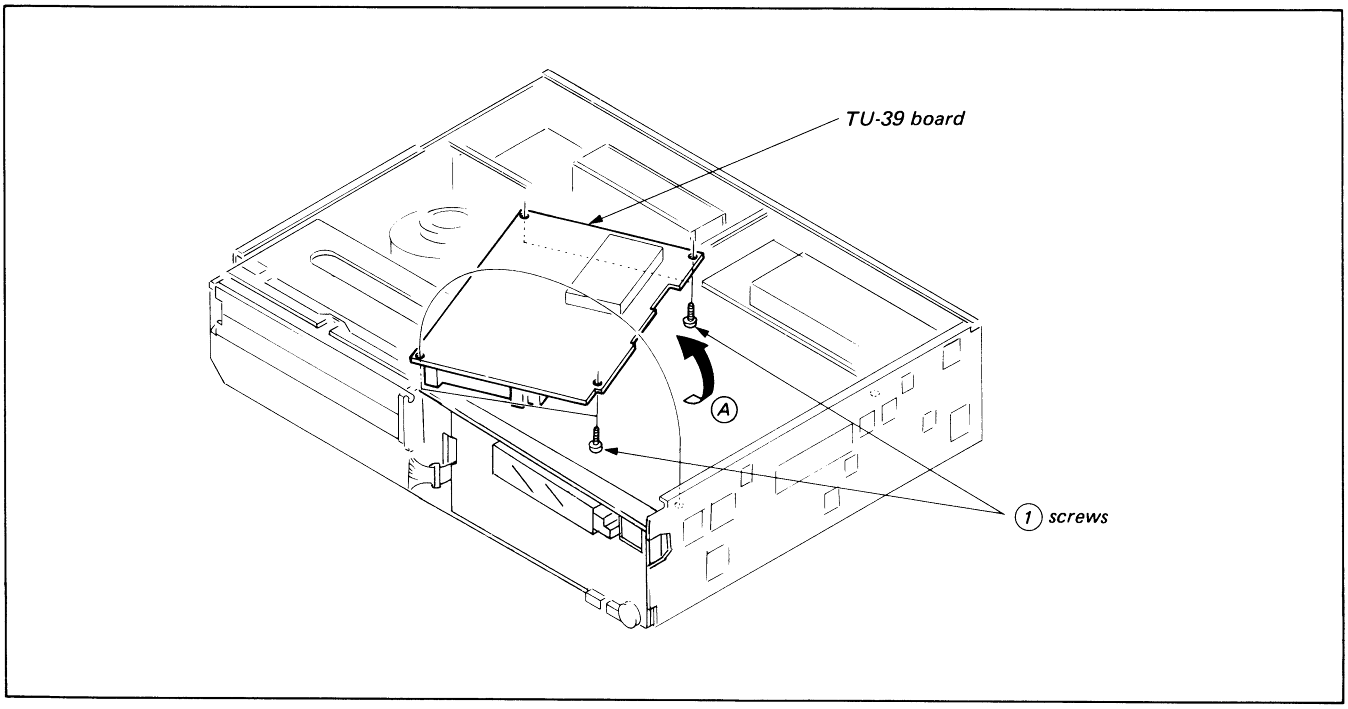
2-8. REMOVAL OF THE RY-1 BOARD

1) Stand the set with the right side panel on the bottom.
2) Remove the two screws ①, holding the RY-1 board.
3) Swing open the RY-1 board in the direction shown by the arrow Ⓐ and rest it on a cassette.


RY-1 board
Ⓐ
① screws
Cassette

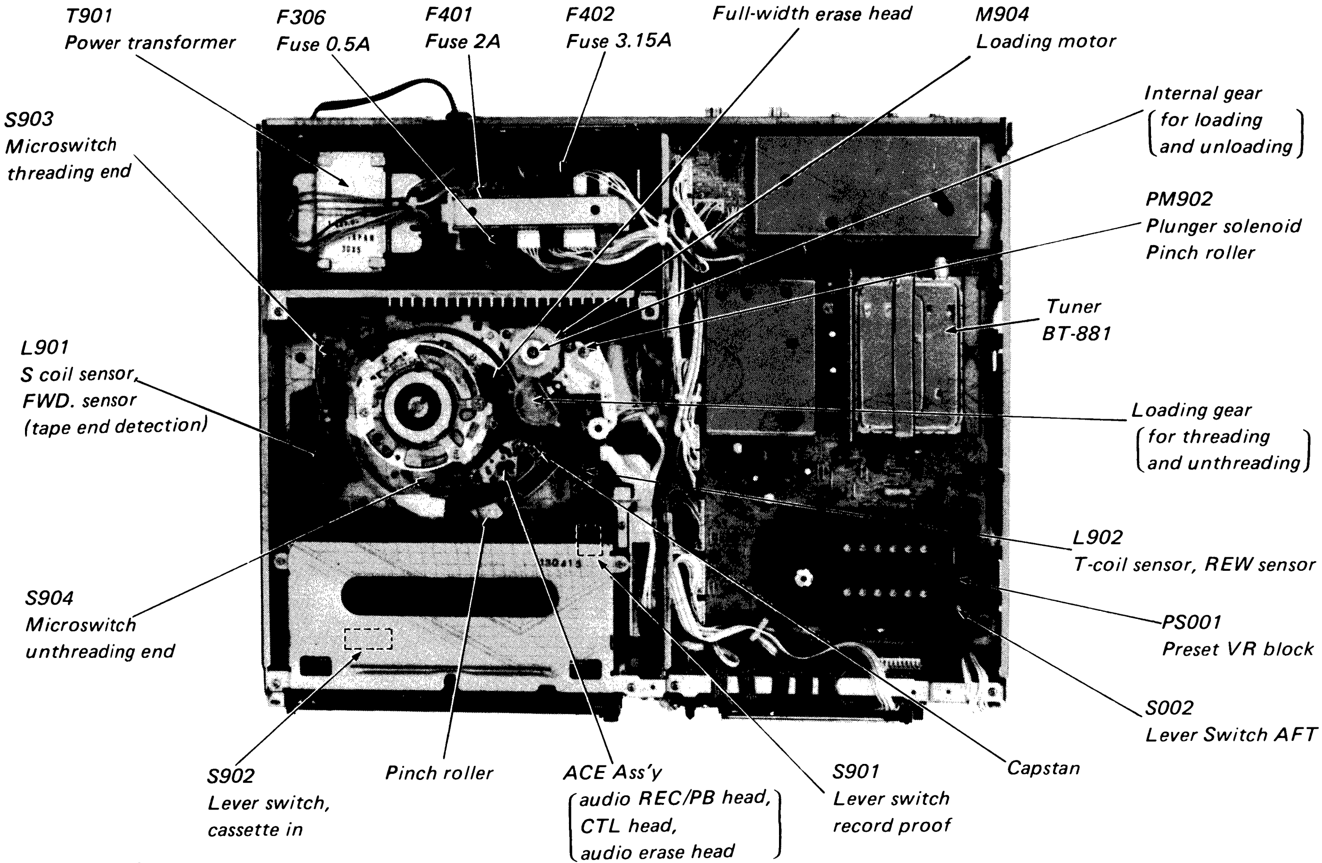
2-9. REMOVAL OF THE TU-39 BOARD

1) Remove the four screws ① holding the TU-39 board.
2) Remove the TU-39 board in the direction shown by the arrow Ⓐ.

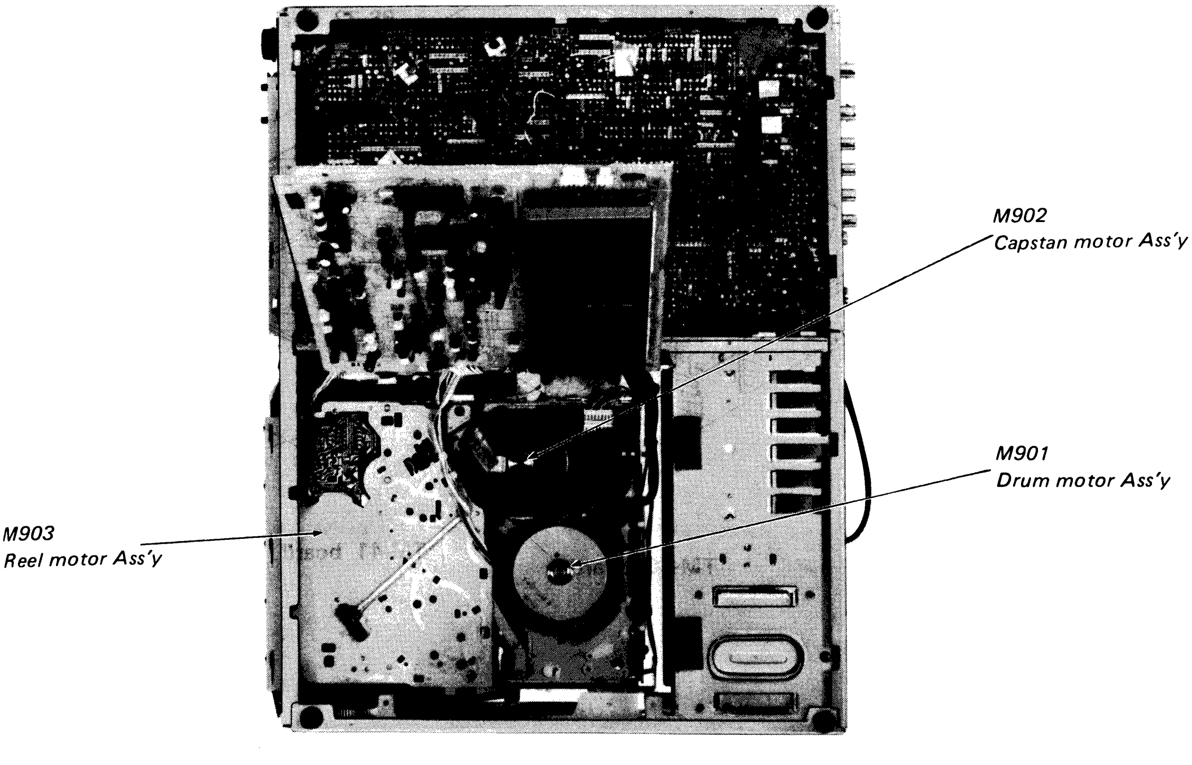

TU-39 board
Ⓐ
① screws

2-10. INTERNAL VIEWS

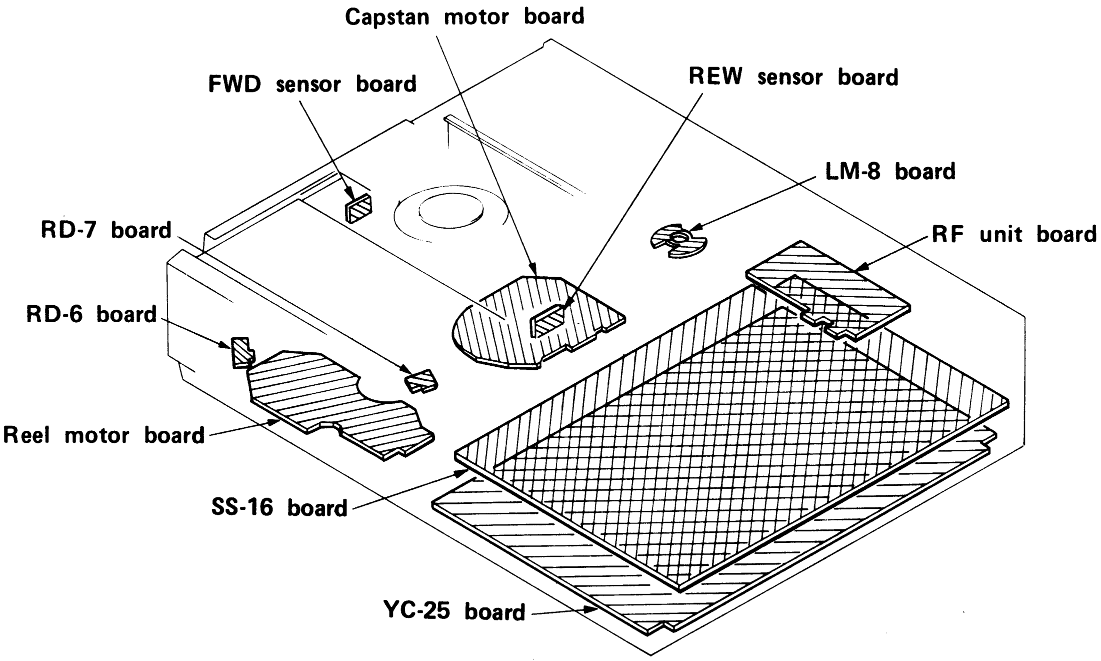
– Top side –

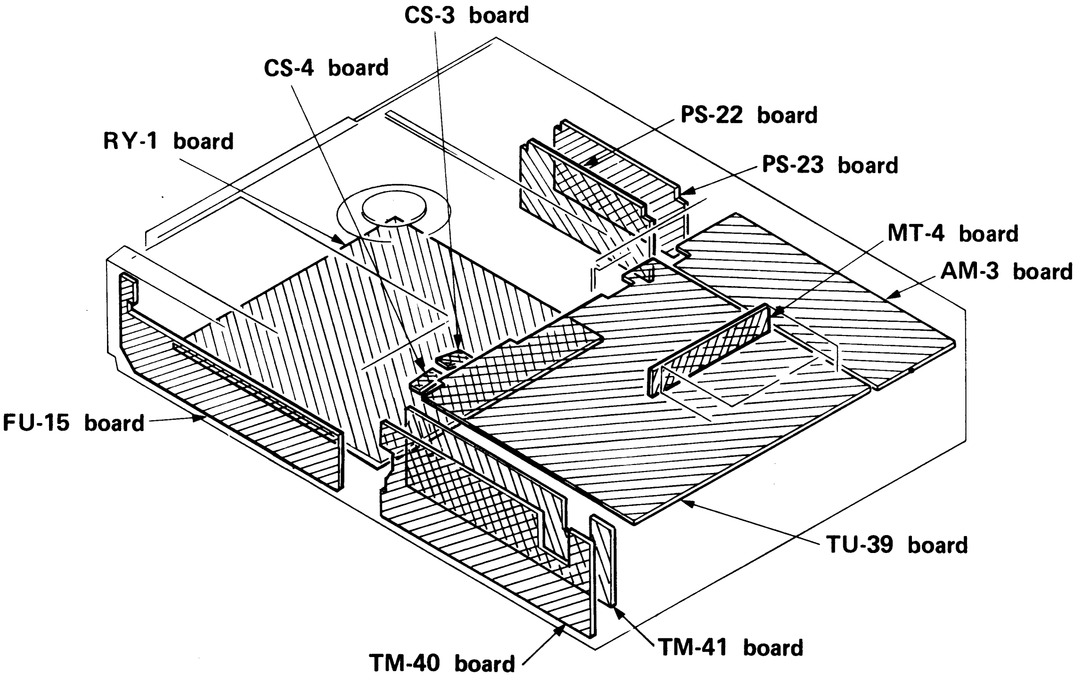

T901
Power transformer
F306
Fuse 0.5A
F401
Fuse 2A
F402
Fuse 3.15A
Full-width erase head
M904
Loading motor
S903
Microswitch
threading end
Internal gear
(for loading and unloading)
PM902
Plunger solenoid
Pinch roller
Tuner
BT-881
L901
S coil sensor,
FWD. sensor
(tape end detection)
Loading gear
(for threading and unthreading)
L902
T-coil sensor, REW sensor
S904
Microswitch
unthreading end
PS001
Preset VR block
S002
Lever Switch AFT
S902
Lever switch,
cassette in
Pinch roller
ACE Ass'y
(audio REC/PB head,
CTL head,
audio erase head)
S901
Lever switch
record proof
Capstan

– Bottom side –


M902
Capstan motor Ass'y
M901
Drum motor Ass'y
M903
Reel motor Ass'y

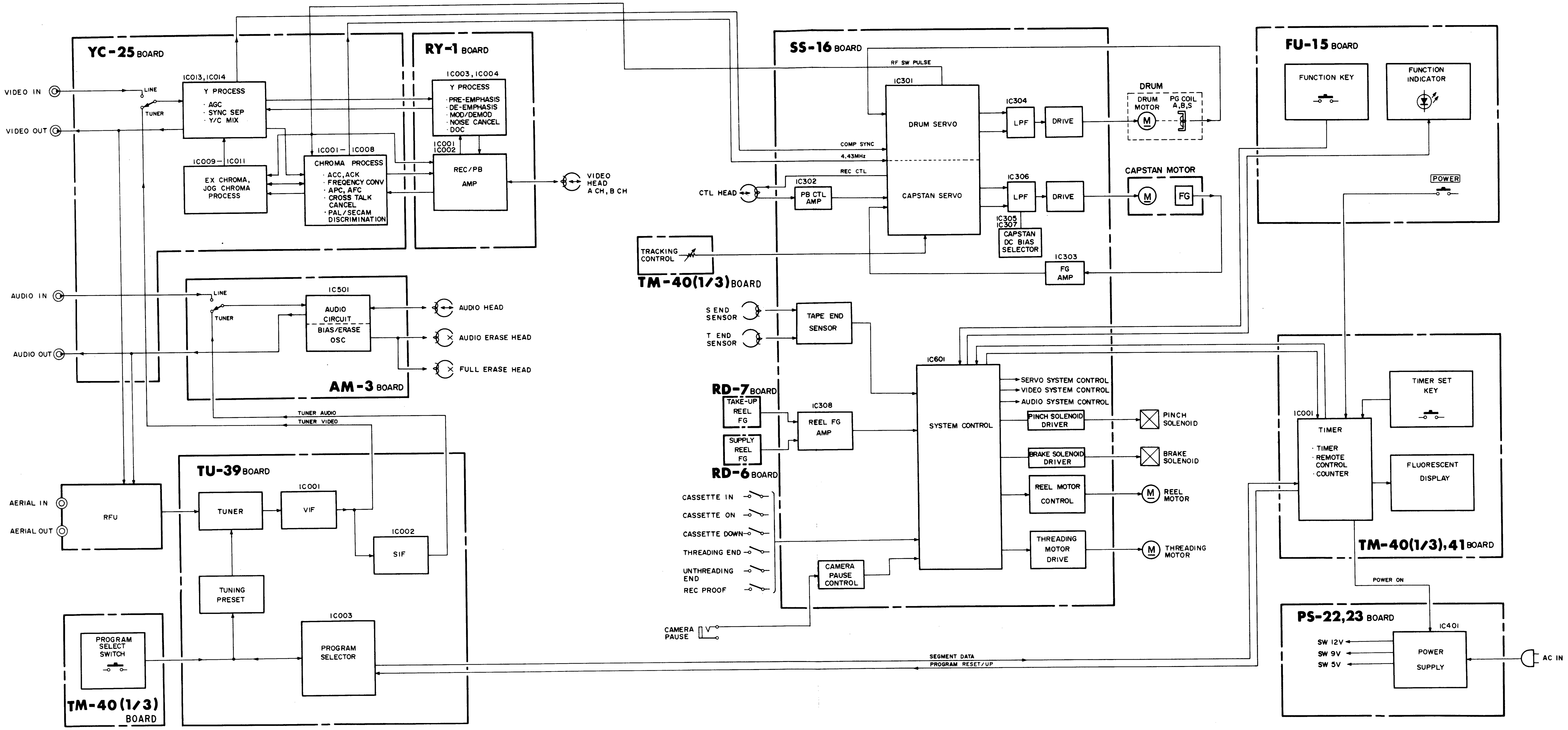
2-11. BOARD ARRANGEMENT


Capstan motor board
FWD sensor board
REW sensor board
LM-8 board
RD-7 board
RF unit board
RD-6 board
Reel motor board
SS-16 board
YC-25 board

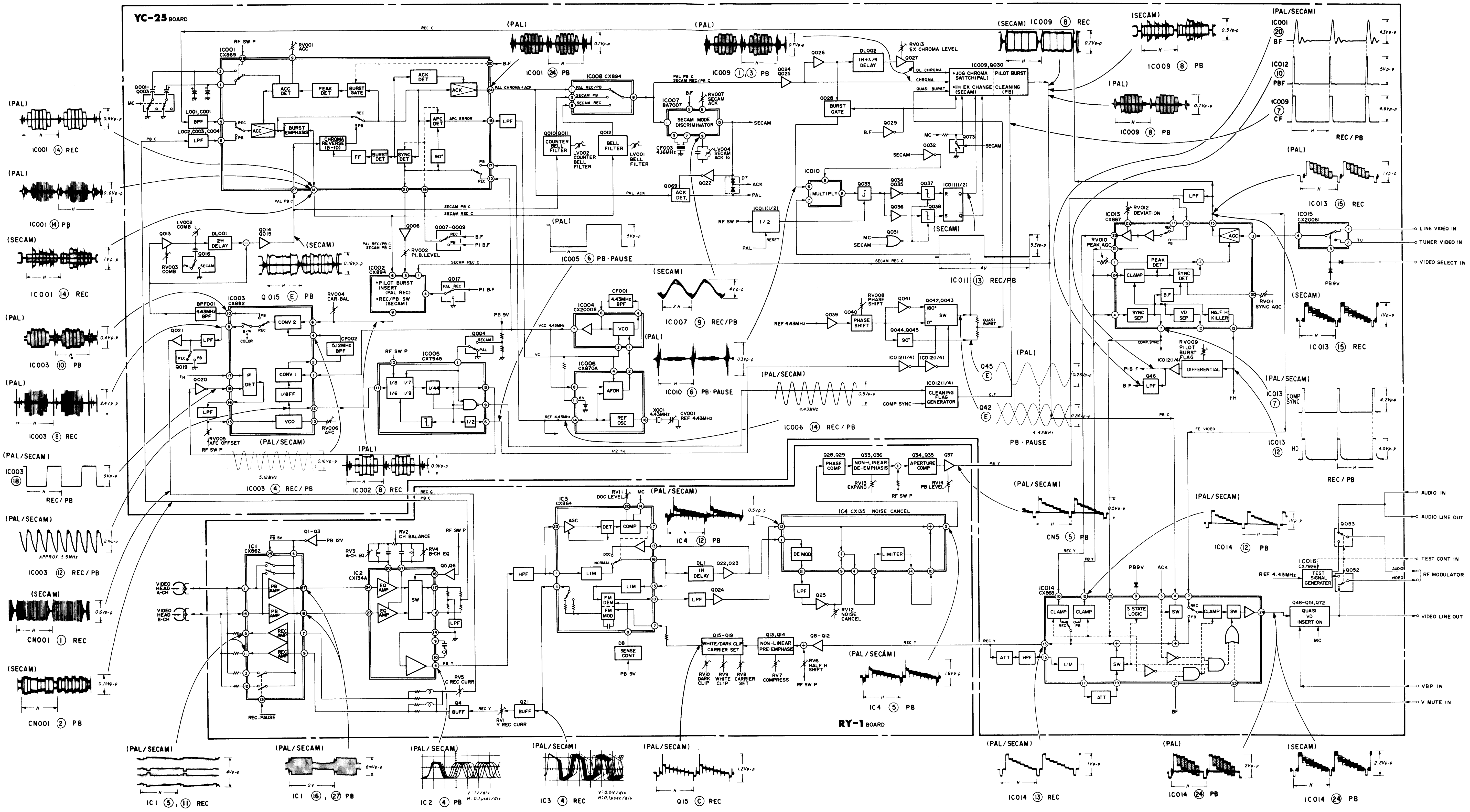

CS-3 board
CS-4 board
PS-22 board
RY-1 board
PS-23 board
MT-4 board
AM-3 board
FU-15 board
TU-39 board
TM-41 board
TM-40 board

SECTION 3
DIAGRAMS

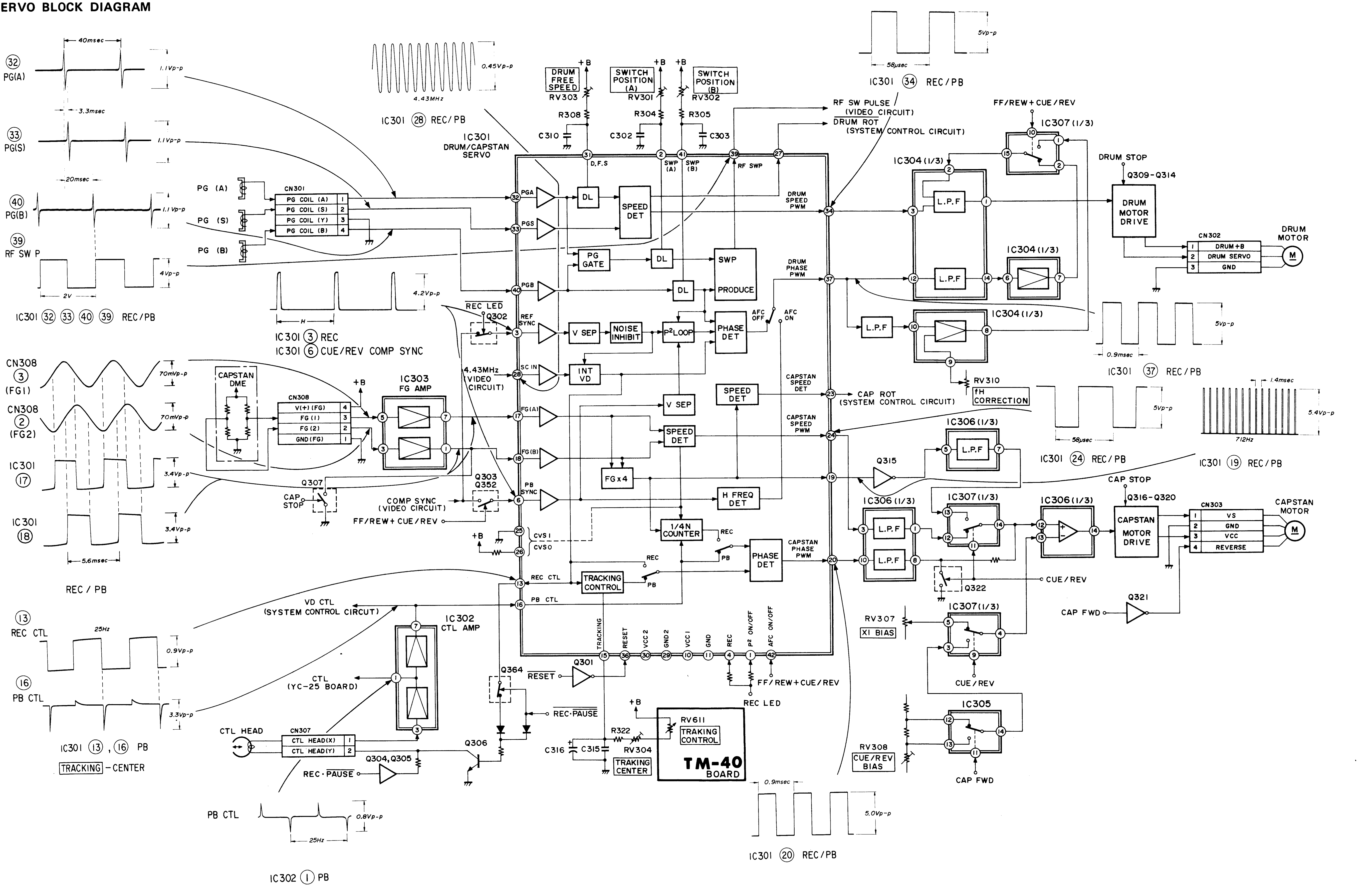
OVERALL BLOCK DIAGRAM


YC-25 BOARD
VIDEO IN
VIDEO OUT
LINE
TUNER
IC013, IC014
Y PROCESS
· AGC
· SYNC SEP
· Y/C MIX
IC009–IC011
EX CHROMA, JOG CHROMA PROCESS
IC001–IC008
CHROMA PROCESS
· ACC, ACK
· FREQENCY CONV
· APC, AFC
· CROSS TALK CANCEL
· PAL/SECAM DISCRIMINATION
RY-1 BOARD
IC003, IC004
Y PROCESS
· PRE-EMPHASIS
· DE-EMPHASIS
· MOD/DEMOD
· NOISE CANCEL
· DOC
IC001
IC002
REC/PB AMP
VIDEO HEAD A CH, B CH
AUDIO IN
AUDIO OUT
LINE
TUNER
IC501
AUDIO CIRCUIT
BIAS/ERASE OSC
AUDIO HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
AM-3 BOARD
TUNER AUDIO
TUNER VIDEO
AERIAL IN
AERIAL OUT
RFU
TU-39 BOARD
TUNER
IC001
VIF
IC002
SIF
TUNING PRESET
IC003
PROGRAM SELECTOR
PROGRAM SELECT SWITCH
TM-40(1/3) BOARD
TRACKING CONTROL
TM-40(1/3) BOARD
SS-16 BOARD
RF SW PULSE
IC301
DRUM SERVO
CAPSTAN SERVO
COMP SYNC
4.43MHz
REC CTL
CTL HEAD
IC302
PB CTL AMP
IC304
LPF
DRIVE
IC306
LPF
DRIVE
IC305
IC307
CAPSTAN DC BIAS SELECTOR
IC303
FG AMP
DRUM
DRUM MOTOR
PG COIL A,B,S
M
CAPSTAN MOTOR
M
FG
S END SENSOR
T END SENSOR
TAPE END SENSOR
RD-7 BOARD
TAKE-UP REEL FG
SUPPLY REEL FG
RD-6 BOARD
IC308
REEL FG AMP
IC601
SYSTEM CONTROL
SERVO SYSTEM CONTROL
VIDEO SYSTEM CONTROL
AUDIO SYSTEM CONTROL
PINCH SOLENOID DRIVER
PINCH SOLENOID
BRAKE SOLENOID DRIVER
BRAKE SOLENOID
REEL MOTOR CONTROL
M
REEL MOTOR
THREADING MOTOR DRIVE
M
THREADING MOTOR
CASSETTE IN
CASSETTE ON
CASSETTE DOWN
THREADING END
UNTHREADING END
REC PROOF
CAMERA PAUSE CONTROL
CAMERA PAUSE
FU-15 BOARD
FUNCTION KEY
FUNCTION INDICATOR
POWER
TIMER SET KEY
IC001
TIMER
· TIMER
· REMOTE CONTROL
· COUNTER
FLUORESCENT DISPLAY
TM-40(1/3), 41 BOARD
POWER ON
PS-22, 23 BOARD
IC401
POWER SUPPLY
SW 12V
SW 9V
SW 5V
AC IN
SEGMENT DATA
PROGRAM RESET/UP

VIDEO BLOCK DIAGRAM

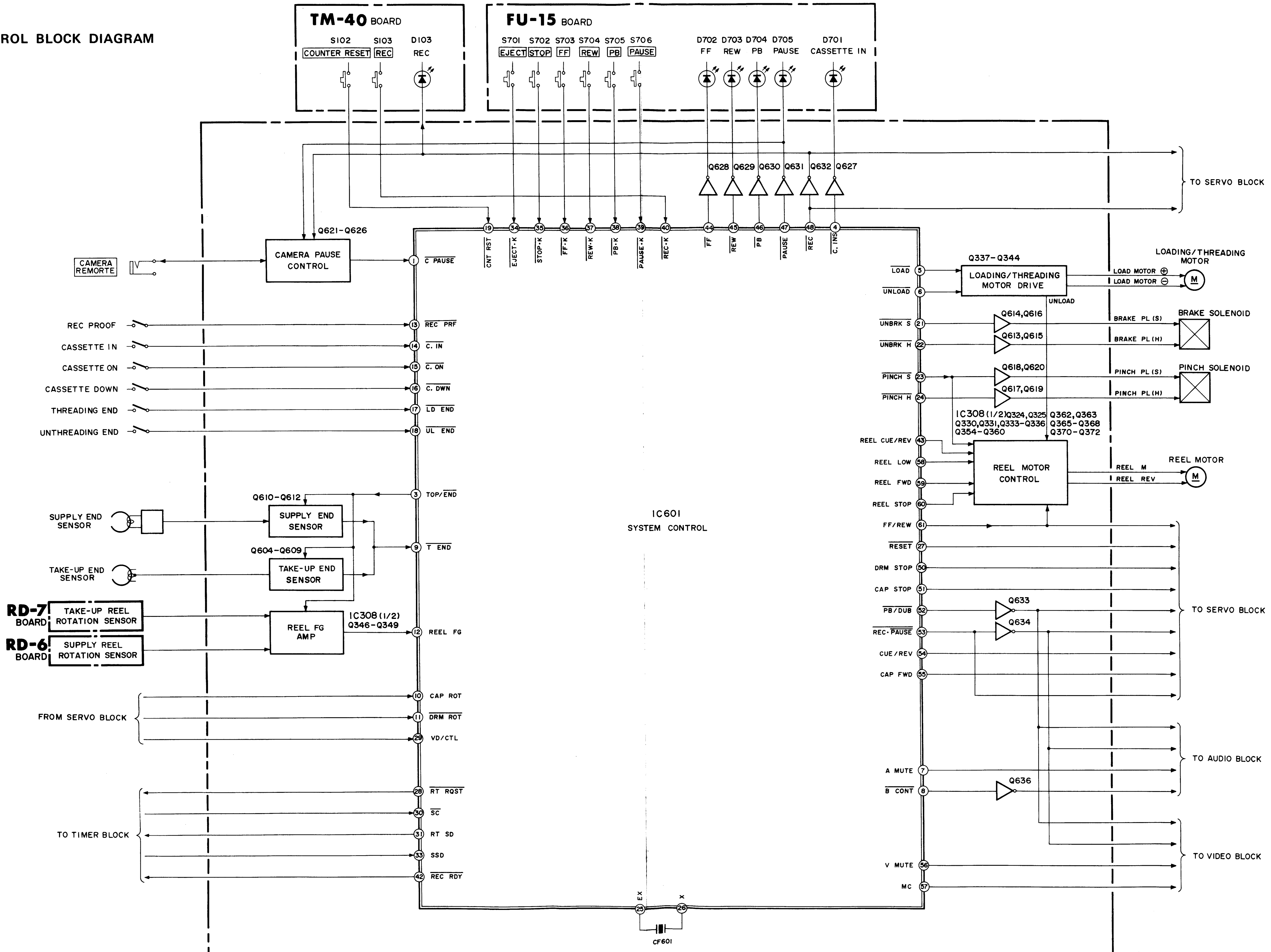

YC-25 BOARD
RY-1 BOARD
IC001 CX869
IC002 CX894
IC003 CX882
IC004 CX20008
IC005 CX7945
IC006 CX870A
IC007 BA7007
IC008 CX894
IC009,Q030
IC010
IC011(1/2)
IC012(1/4)
IC013 CX867
IC014 CX868
IC015 CX20061
IC016 CX7926
IC1 CX862
IC2 CX134A
IC3 CX864
IC4 CX135 NOISE CANCEL
ACC DET
PEAK DET
BURST GATE
ACK DET
ACK
APC DET
BURST EMPHASIS
CHROMA REVERSE (B-ID)
SYNC DET
90°
LPF
BPF
COUNTER BELL FILTER
BELL FILTER
SECAM MODE DISCRIMINATOR
1H+λ/4 DELAY
BURST GATE
MULTIPLY
PHASE SHIFT
CLEANING FLAG GENERATOR
JOG CHROMA SWITCH(PAL)
IH EX CHANGE (SECAM)
PILOT BURST CLEANING (PB)
2H DELAY
CONV 2
CONV 1
1/8FF
VCO
AFDR
REF OSC
*PILOT BURST INSERT (PAL REC)
*REC/PB SW (SECAM)
1/8 1/7 1/6 1/9 1/44 1/2
AGC
CLAMP
PEAK DET
SYNC DET
SYNC SEP
VD SEP
HALF H KILLER
DIFFERENTIAL
PHASE COMP
NON-LINEAR DE-EMPHASIS
APERTURE COMP
DET COMP
LIM
FM DEM
FM MOD
SENSE CONT
1H DELAY
DE MOD
LIMITER
WHITE/DARK CLIP CARRIER SET
NON-LINEAR PRE-EMPHASIS
PB AMP
REC AMP
EQ AMP
SW
BUFF
HPF
ATT
3 STATE LOGIC
TEST SIGNAL GENERATOR
QUASI VD INSERTION
VIDEO HEAD A-CH
VIDEO HEAD B-CH
LINE VIDEO IN
TUNER VIDEO IN
VIDEO SELECT IN
AUDIO IN
AUDIO LINE OUT
TEST CONT IN
RF MODULATOR
VIDEO LINE OUT
VBP IN
V MUTE IN
RV001 ACC
RV002 PI. B. LEVEL
RV003 COMB
RV004 CAR. BAL
RV005 AFC OFFSET
RV006 AFC
RV007 SECAM ACK
RV008 PHASE SHIFT
RV009 PILOT BURST FLAG
RV010 PEAK AGC
RV011 SYNC AGC
RV012 DEVIATION
RV013 EX CHROMA LEVEL
RV1 Y REC CURR
RV2 CH BALANCE
RV3 A-CH EQ
RV4 B-CH EQ
RV5 C REC CURR
RV6 HALF H SHIFT
RV7 COMPRESS
RV8 CARRIER SET
RV9 WHITE CLIP
RV10 DARK CLIP
RV11 DOC LEVEL
RV12 NOISE CANCEL
RV13 EXPAND
RV14 PB LEVEL
(PAL) IC001 ⑭ REC
(PAL) IC001 ⑭ PB
(SECAM) IC001 ⑭ REC
(PAL) IC003 ⑩ PB
(PAL) IC003 ⑧ REC
(PAL/SECAM) IC003 ⑱ REC/PB
(PAL/SECAM) IC003 ⑫ REC/PB APPROX. 5.5MHz
(SECAM) CN001 ① REC
(SECAM) CN001 ② PB
(PAL) IC001 ㉔ PB
(PAL) IC009 ①,③ PB
(SECAM) IC009 ⑧ REC
(SECAM) IC009 ⑧ PB
(PAL) IC009 ⑧ PB
(PAL/SECAM) IC001 ⑳ BF
IC012 ⑩ PBF
IC009 ⑦ CF
REC/PB
Q015 Ⓔ PB
IC005 ⑥ PB·PAUSE
(SECAM) IC007 ⑨ REC/PB
(PAL) IC010 ⑥ PB·PAUSE
(PAL/SECAM) IC006 ⑭ REC/PB
IC011 ⑬ REC/PB
(PAL) Q45 Ⓔ Q42 Ⓔ PB·PAUSE
(PAL/SECAM) IC003 ④ REC/PB 5.12MHz
(PAL) IC002 ⑧ REC
(PAL) IC013 ⑮ REC
(SECAM) IC013 ⑮ REC
(PAL/SECAM) IC013 ⑦ COMP SYNC
IC013 ⑫ HD
(PAL/SECAM) IC4 ⑫ PB
(PAL/SECAM) CN5 ⑤ PB
(PAL/SECAM) IC014 ⑫ PB
(PAL/SECAM) IC4 ⑤ PB
(PAL/SECAM) IC1 ⑤,⑪ REC
(PAL/SECAM) IC1 ⑯,㉗ PB
(PAL/SECAM) IC2 ④ PB V:1V/div H:0.1μsec/div
(PAL/SECAM) IC3 ④ REC V:0.5V/div H:0.1μsec/div
(PAL/SECAM) Q15 Ⓒ REC
(PAL/SECAM) IC014 ⑬ REC
(PAL) IC014 ㉔ PB
(SECAM) IC014 ㉔ PB
REC C
PB C
REC Y
PB Y
RF SW P
SECAM PB C
SECAM REC C
PAL ACK
PB 9V
REF 4.43MHz
X001 4.43MHz
CF001 4.43MHz BPF
CF002 5.12MHz BPF
BPF001 4.43MHz BPF
LV002 COMB
DL001 2H DELAY
DL002
DL1 1H DELAY
D7
D8
EE VIDEO
REC.PAUSE

SERVO BLOCK DIAGRAM



㉜ PG(A)
40msec
1.1Vp-p
3.3msec
㉝ PG(S)
1.1Vp-p
20msec
㊵ PG(B)
1.1Vp-p
㊴ RF SW P
4Vp-p
2V
IC301 ㉜ ㉝ ㊵ ㊴ REC/PB
4.43MHz
0.45Vp-p
IC301 ㉘ REC/PB
IC301 DRUM/CAPSTAN SERVO
4.2Vp-p
H
IC301 ③ REC
IC301 ⑥ CUE/REV COMP SYNC
CN308 ③ (FG1)
70mVp-p
CN308 ② (FG2)
70mVp-p
IC301 ⑰
3.4Vp-p
IC301 ⑱
3.4Vp-p
5.6msec
REC / PB
⑬ REC CTL
25Hz
0.9Vp-p
⑯ PB CTL
3.3Vp-p
IC301 ⑬, ⑯ PB
TRACKING - CENTER
PB CTL
0.8Vp-p
25Hz
IC302 ① PB
PG (A)
PG (S)
PG (B)
CN301
PG COIL (A) 1
PG COIL (S) 2
PG COIL (Y) 3
PG COIL (B) 4
CAPSTAN DME
CN308
V(+) (FG) 4
FG (1) 3
FG (2) 2
GND (FG) 1
+B
IC303 FG AMP
Q307
CAP STOP
COMP SYNC (VIDEO CIRCUIT)
FF/REW+CUE/REV
Q303 Q352
REC LED
Q302
4.43MHz (VIDEO CIRCUIT)
VD CTL (SYSTEM CONTROL CIRCUT)
IC302 CTL AMP
CTL (YC-25 BOARD)
CTL HEAD
CN307
CTL HEAD(X) 1
CTL HEAD(Y) 2
Q304,Q305
REC·PAUSE
Q306
Q364
RESET
Q301
REC·PAUSE
+B
R322
C316
C315
RV304
TRAKING CENTER
RV611
TRAKING CONTROL
TM-40 BOARD
DRUM FREE SPEED RV303
R308
C310
SWITCH POSITION (A) RV301
R304
C302
SWITCH POSITION (B) RV302
R305
C303
D.F.S
SWP (A)
SWP (B)
RF SWP
PGA
PGS
PGB
REF SYNC
SC IN
FG(A)
FG(B)
PB SYNC
CVS I
CVSO
REC CTL
PB CTL
DL
SPEED DET
PG GATE
DL
DL
SWP PRODUCE
V SEP
NOISE INHIBIT
P² LOOP
PHASE DET
AFC OFF
AFC ON
INT VD
V SEP
SPEED DET
SPEED DET
FG x4
H FREQ DET
1/4N COUNTER
REC
PB
REC
TRACKING CONTROL
PB
PHASE DET
TRACKING
RESET
VCC 2
GND 2
VCC 1
GND
REC
P² ON/OFF
AFC ON/OFF
FF/REW+CUE/REV
REC LED
DRUM SPEED PWM
DRUM PHASE PWM
CAPSTAN SPEED DET
CAPSTAN SPEED PWM
CAPSTAN PHASE PWM
RF SW PULSE (VIDEO CIRCUIT)
DRUM ROT (SYSTEM CONTROL CIRCUIT)
CAP ROT (SYSTEM CONTROL CIRCUIT)
5Vp-p
58μsec
IC301 ㉞ REC/PB
FF/REW+CUE/REV
IC307 (1/3)
IC304 (1/3)
L.P.F
L.P.F
IC304 (1/3)
DRUM STOP
Q309-Q314
DRUM MOTOR DRIVE
CN302
1 DRUM+B
2 DRUM SERVO
3 GND
DRUM MOTOR
M
L.P.F
IC304 (1/3)
RV310
fH CORRECTION
5Vp-p
0.9msec
IC301 ㊲ REC/PB
5Vp-p
58μsec
IC301 ㉔ REC/PB
1.4msec
5.4Vp-p
712Hz
IC301 ⑲ REC/PB
IC306 (1/3)
L.P.F
Q315
IC306 (1/3)
L.P.F
L.P.F
IC307 (1/3)
IC306 (1/3)
CAP STOP
Q316-Q320
CAPSTAN MOTOR DRIVE
CN303
1 VS
2 GND
3 VCC
4 REVERSE
CAPSTAN MOTOR
M
Q322
CUE/REV
Q321
CAP FWD
RV307
XI BIAS
IC307 (1/3)
CUE/REV
IC305
RV308
CUE/REV BIAS
CAP FWD
0.9msec
5.0Vp-p
IC301 ⑳ REC/PB

SYSTEM CONTROL BLOCK DIAGRAM



TM-40 BOARD
S102 COUNTER RESET
S103 REC
D103 REC
FU-15 BOARD
S701 EJECT
S702 STOP
S703 FF
S704 REW
S705 PB
S706 PAUSE
D702 FF
D703 REW
D704 PB
D705 PAUSE
D701 CASSETTE IN
Q628 Q629 Q630 Q631 Q632 Q627
TO SERVO BLOCK
Q621-Q626
CAMERA PAUSE CONTROL
CAMERA REMORTE
C PAUSE
CNT RST
EJECT-K
STOP-K
FF-K
REW-K
PB-K
PAUSE-K
REC-K
FF
REW
PB
PAUSE
REC
C. INS
REC PROOF
CASSETTE IN
CASSETTE ON
CASSETTE DOWN
THREADING END
UNTHREADING END
REC PRF
C. IN
C. ON
C. DWN
LD END
UL END
Q610-Q612
SUPPLY END SENSOR
TOP/END
Q604-Q609
TAKE-UP END SENSOR
T END
RD-7 BOARD
TAKE-UP REEL ROTATION SENSOR
RD-6 BOARD
SUPPLY REEL ROTATION SENSOR
REEL FG AMP
IC308 (1/2)
Q346-Q349
REEL FG
FROM SERVO BLOCK
CAP ROT
DRM ROT
VD/CTL
TO TIMER BLOCK
RT RQST
SC
RT SD
SSD
REC RDY
IC601
SYSTEM CONTROL
EX
X
CF601
Q337-Q344
LOADING/THREADING MOTOR DRIVE
LOADING/THREADING MOTOR
LOAD
UNLOAD
LOAD MOTOR ⊕
LOAD MOTOR ⊖
M
UNBRK S
UNBRK H
Q614,Q616
Q613,Q615
BRAKE PL (S)
BRAKE PL (H)
BRAKE SOLENOID
PINCH S
PINCH H
Q618,Q620
Q617,Q619
PINCH PL (S)
PINCH PL (H)
PINCH SOLENOID
IC308 (1/2) Q324,Q325 Q362,Q363
Q330,Q331,Q333-Q336 Q365-Q368
Q354-Q360 Q370-Q372
REEL CUE/REV
REEL LOW
REEL FWD
REEL STOP
REEL MOTOR CONTROL
REEL M
REEL REV
REEL MOTOR
FF/REW
RESET
DRM STOP
CAP STOP
PB/DUB
REC·PAUSE
CUE/REV
CAP FWD
Q633
Q634
TO SERVO BLOCK
TO AUDIO BLOCK
A MUTE
B CONT
Q636
TO VIDEO BLOCK
V MUTE
MC
SS-16 BOARD (SYSTEM CONTROL BLOCK)

SYSTEM CONTROL CIRCUIT AND MECHANISM BLOCK INTERFACE

MODE			EJECTED	LOADING	THREADING	STOP	UN-THREADING	UN-LOADING	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
SIGNAL	I/O	Pin No.											CUE	REV				CUE	REV
$\overline{\text{REC PROOF}}$	I	IC601 13pin	H	H	H/L	H/L	H/L	H	H/L	H/L	H/L	H/L	H/L	H/L	L	L	L	H/L	H/L
$\overline{\text{C·IN}}$	I	IC601 14pin	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{C·ON}}$	I	IC601 15pin	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{C·DWN}}$	I	IC601 16pin	H	H	L	L	L	H	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{LD END}}$	I	IC601 17pin	H	H	H	L	H	H	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{UL END}}$	I	IC601 18pin	L	L	H	H	H	L	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{UNBRK S}}$	O	IC601 21pin	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{UNBRK H}}$	O	IC601 22pin	H	H	L	H	L	H	L	L	L	H	L	L	L	H	L	L	L
$\overline{\text{PINCH S}}$	O	IC601 23pin	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{PINCH H}}$	O	IC601 24pin	H	L	H	H	H	L	H	H	L	H	L	L	L	H	L	H	H
$\overline{\text{LOAD}}$	O	IC601 5pin	H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{UNLOAD}}$	O	IC601 6pin	H	H	H	H	L	L	H	H	H	H	H	H	H	H	H	H	H

SYSTEM CONTROL CIRCUIT AND TIMER CIRCUIT INTERFACE

MODE			STOP	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
SIGNAL	I/O	Pin No.						CUE	REV				CUE	REV
$\overline{\text{RT RQST}}$	I	IC601 28pin												
RTSD	I	IC601 31pin												
$\overline{\text{COUNTER RESET}}$	I	IC601 19pin												
SSD	O	IC601 33pin												
$\overline{\text{SC}}$	O	IC601 30pin												
$\overline{\text{REC READY}}$	O	IC601 42pin	H/L	H	H	H	H	H	H	H	H	L	H	H

SYSTEM CONTROL CIRCUIT AND FUNCTION BLOCK INTERFA

MODE			STOP	FF	REW
SIGNAL	I/O	Pin No.			
$\overline{\text{EJECT·K}}$	I	IC601 34pin	H	H	H
$\overline{\text{STOP·K}}$	I	IC601 35pin	H	H	H
$\overline{\text{FF·K}}$	I	IC601 36pin	H	H	H
$\overline{\text{REW·K}}$	I	IC601 37pin	H	H	H
$\overline{\text{PB·K}}$	I	IC601 38pin	H	H	H
$\overline{\text{PAUSE·K}}$	I	IC601 39pin	H	H	H
$\overline{\text{REC·K}}$	I	IC601 40pin	H	H	H
$\overline{\text{FF}}$	O	IC601 44pin	H	L	H
$\overline{\text{REW}}$	O	IC601 45pin	H	H	L
$\overline{\text{PB}}$	O	IC601 46pin	H	H	H
$\overline{\text{PAUSE}}$	O	IC601 47pin	H	H	H
$\overline{\text{REC}}$	O	IC601 48pin	H	H	H
$\overline{\text{C·IN}}$	O	IC601 4pin	L	L	L

SYSTEM CONTROL CIRCUIT AND ITS PERIPHERAL CIRCUIT I

MODE			STOP	FF	REW
SIGNAL	I/O	Pin No.			
TEND*[1]	I	IC601 9pin	H	H	H
C·PAUSE*[2]	I	IC601 1pin	H	H	H
TOP/END	O	IC601 3pin	L	L	H

*1 "L" at tape end.

*2 Camera pause signal.

W	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
			CUE	REV				CUE	REV
L	H/L	H/L	H/L	H/L	L	L	L	H/L	H/L
	L	L	L	L	L	L	L	L	L
	L	L	L	L	L	L	L	L	L
	L	L	L	L	L	L	L	L	L
	L	L	L	L	L	L	L	L	L
	H	H	H	H	H	H	H	H	H
	H	H	H	H	H	H	H	H	H
	L	H	L	L	L	H	L	L	L
	H	H	H	H	H	H	H	H	H
	L	H	L	L	L	H	L	H	H
	H	H	H	H	H	H	H	H	H
	H	H	H	H	H	H	H	H	H

C	REC·PAUSE	TIMER REC	FR SEARCH	
			CUE	REV
	H	L	H	H

SYSTEM CONTROL CIRCUIT AND FUNCTION BLOCK INTERFACE

SIGNAL \ MODE	I/O	Pin No.	STOP	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
$\overline{\text{EJECT}\cdot\text{K}}$	I	IC601 34pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{STOP}\cdot\text{K}}$	I	IC601 35pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{FF}\cdot\text{K}}$	I	IC601 36pin	H	H	H	H	H	L	H	H	H	H	L	H
$\overline{\text{REW}\cdot\text{K}}$	I	IC601 37pin	H	H	H	H	H	H	L	H	H	H	H	L
$\overline{\text{PB}\cdot\text{K}}$	I	IC601 38pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{PAUSE}\cdot\text{K}}$	I	IC601 39pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{REC}\cdot\text{K}}$	I	IC601 40pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{FF}}$	O	IC601 44pin	H	L	H	H	H	L	H	H	H	H	L	H
$\overline{\text{REW}}$	O	IC601 45pin	H	H	L	H	H	H	L	H	H	H	H	L
$\overline{\text{PB}}$	O	IC601 46pin	H	H	H	L	L	L	L	H	H	H	L	L
$\overline{\text{PAUSE}}$	O	IC601 47pin	H	H	H	H	L	H	H	H	L	H	H	H
$\overline{\text{REC}}$	O	IC601 48pin	H	H	H	H	H	H	H	L	L	L	H	H
$\overline{\text{C}\cdot\text{IN}}$	O	IC601 4pin	L	L	L	L	L	L	L	L	L	L	L	L

SYSTEM CONTROL CIRCUIT AND ITS PERIPHERAL CIRCUIT INTERFACE

SIGNAL \ MODE	I/O	Pin No.	STOP	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
TEND*[1]	I	IC601 9pin	H	H	H	H	H	H	H	H	H	H	H	H
C·PAUSE*[2]	I	IC601 1pin	H	H	H	H	H	H	H	H	H	H	H	H
TOP/END	O	IC601 3pin	L	L	H	L	L	L	H	L	L	L	L	H

*1 "L" at tape end.

*2 Camera pause signal.

SYSTEM CONTROL CIRCUIT AND REEL MOTOR CONTROL CIRCUIT INTERFACE

MODE / SIGNAL	I/O	Pin No.	EJECTED	LOADING	THREADING	STOP	UN-THREADING	UN-LOADING	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
													CUE	REV				CUE	REV
REEL FG	I	IC601 12pin																	
REEL LOW	O	IC601 58pin	L	L	H	L	H	L	L	L	H	H	L	L	H	H	H	H	H
REEL FWD	O	IC601 59pin	H	H	H	H	L	H	H	L	H	H	H	L	H	H	H	H	L
REEL STOP	O	IC601 60pin	H	H	L	H	L	H	L	L	L	H	L	L	L	H	L	L	L
FF/REW	O	IC601 61pin	L	L	L	L	L	L	H	H	L	L	L	L	L	L	L	H	H
REEL CUE/REV	O	IC601 43pin	L	L	L	L	L	L	L	L	L	L	H	H	L	L	L	L	L
$\overline{\text{PINCH S}}$	O	IC601 23pin	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
TOP/$\overline{\text{END}}$	O	IC601 3pin	L	L	L	L	L	L	L	H	L	L	L	H	L	L	L	L	H
$\overline{\text{UNLOAD}}$	O	IC601 6pin	H	H	H	H	L	L	H	H	H	H	H	H	H	H	H	H	H

SYSTEM CONTROL CIRCUIT AND VIDEO CIRCUIT INTERFACE

MODE / SIGNAL	I/O	Pin No.	STOP (E-E)	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
V MUTE	O	IC601 56pin	L	L	L	L	L	L	L	L	L	L	L	L
MC	O	IC601 57pin	L	L	L	L	H	H	H	L	L	L	H	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H	H	H	H	H	H	H	L	H	L	H	H
$\overline{\text{PB + DUB}}$	O	IC601 52pin	H	H	H	L	L	L	L	H	H	H	L	L

SYSTEM CONTROL CIRCUIT AND SERVO CIRCUIT

MODE / SIGNAL	I/O	Pin No.	STOP	FF
$\overline{\text{DRUM ROT}}$	I	IC601 11pin	H	L
CAP ROT	I	IC601 10pin	L	L
VD/CTL	I	IC601 29pin		CTL
DRUM STOP	O	IC601 50pin	H	L
CAP STOP	O	IC601 51pin	H	H
$\overline{\text{PB + DUB}}$	O	IC601 52pin	H	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H	H
CUE/REV	O	IC601 54pin	L	L
CAP FWD	O	IC601 55pin	H	H
$\overline{\text{194 RESET}}$*[1]	O	IC601 27pin	H	H

*1 Reset signal for CX194.

SYSTEM CONTROL CIRCUIT AND AUDIO CIRCUIT

MODE / SIGNAL	I/O	Pin No.	STOP (E-E)	FF
A MUTE	O	IC601 7pin	L	L
B CONT	O	IC601 8pin	H	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H	H
$\overline{\text{PB + DUB}}$	O	IC601 52pin	H	H

W	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
			CUE	REV				CUE	REV
	H	H	L	L	H	H	H	H	H
	H	H	H	L	H	H	H	H	L
	L	H	L	L	L	H	L	L	L
	L	L	L	L	L	L	L	H	H
	L	L	H	H	L	L	L	L	L
	H	H	H	H	H	H	H	H	H
	L	L	L	H	L	L	L	L	H
	H	H	H	H	H	H	H	H	H

C	REC·PAUSE	TIMER REC	FR SEARCH	
			CUE	REV
	L	L	L	L
	L	L	H	H
	H	L	H	H
	H	H	L	L

SYSTEM CONTROL CIRCUIT AND SERVO CIRCUIT INTERFACE

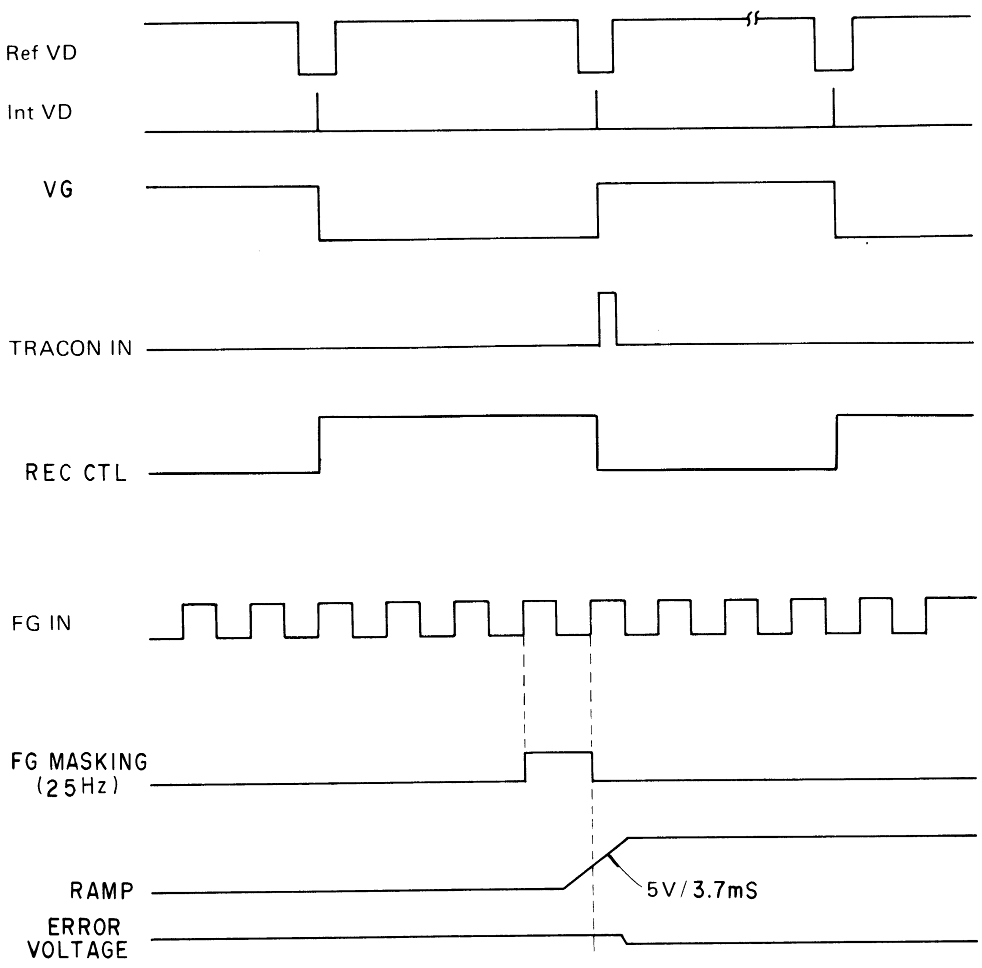
MODE SIGNAL	I/O	Pin No.	STOP	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
$\overline{\text{DRUM ROT}}$	I	IC601 11pin	H	L	L	L	L	L	L	L	L	L	L	L
CAP ROT	I	IC601 10pin	L	L	L	H	H	H	H	H	H	H	L	L
VD/CTL	I	IC601 29pin		CTL	CTL	CTL		CTL	CTL	VD		VD	CTL	CTL
DRUM STOP	O	IC601 50pin	H	L	L	L	L	L	L	L	L	L	L	L
CAP STOP	O	IC601 51pin	H	H	H	L	L	L	L	L	L	L	H	H
$\overline{\text{PB + DUB}}$	O	IC601 52pin	H	H	H	L	L	L	L	H	H	H	L	L
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H	H	H	H	H	H	H	L	H	L	H	H
CUE/REV	O	IC601 54pin	L	L	L	L	L	H	H	L	L	L	L	L
CAP FWD	O	IC601 55pin	H	H	H	H	H	H	L	H	H	H	H	H
$\overline{\text{194 RESET}}$*[1]	O	IC601 27pin	H	H	H	H	H	H	H	H	H	H	H	H

*1 Reset signal for CX194.

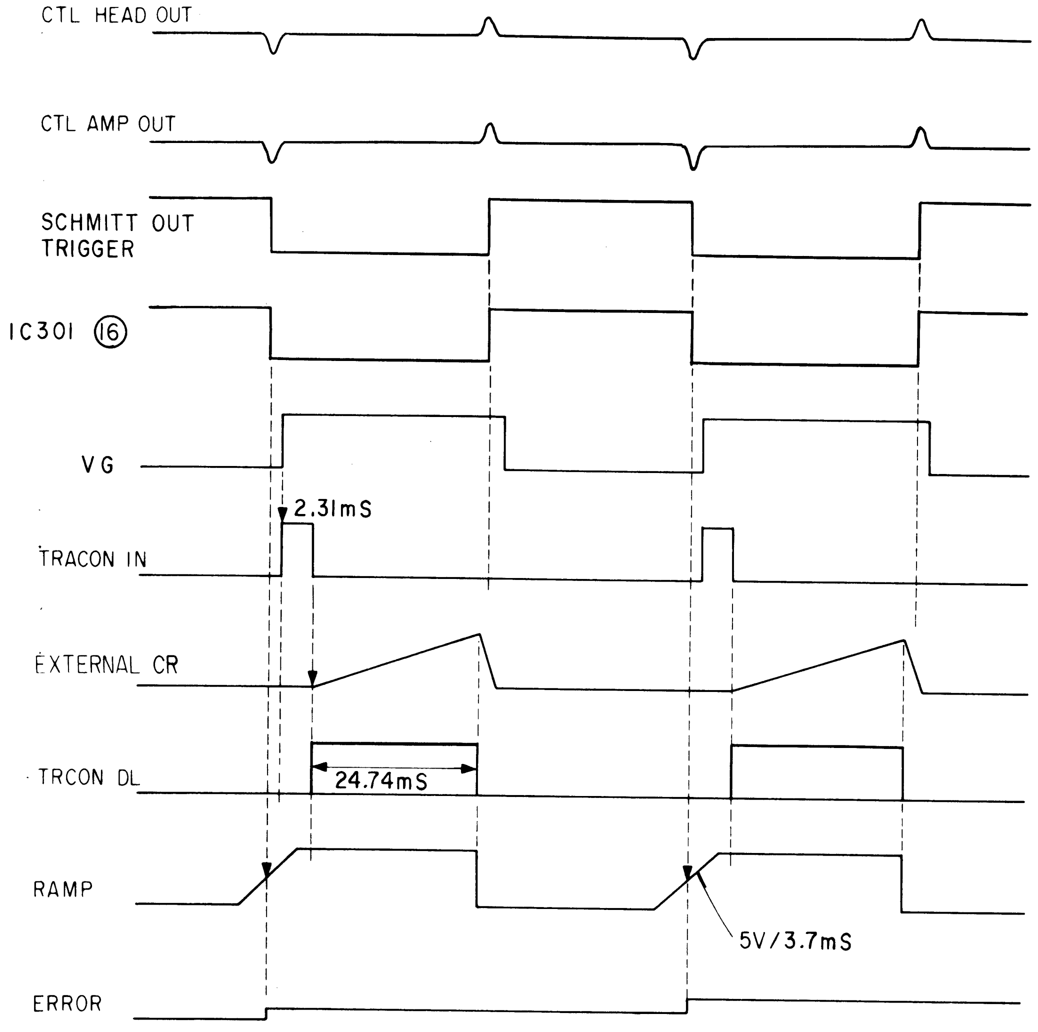
SYSTEM CONTROL CIRCUIT AND AUDIO CIRCUIT INTERFACE

MODE SIGNAL	I/O	Pin No.	STOP (E-E)	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
A MUTE	O	IC601 7pin	L	L	L	L	H	H	H	L	L	L	H	H
B CONT	O	IC601 8pin	H	H	H	H	H	H	H	L	H	L	H	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H	H	H	H	H	H	H	L	H	L	H	H
$\overline{\text{PB + DUB}}$	O	IC601 52pin	H	H	H	L	L	L	L	H	H	H	L	L

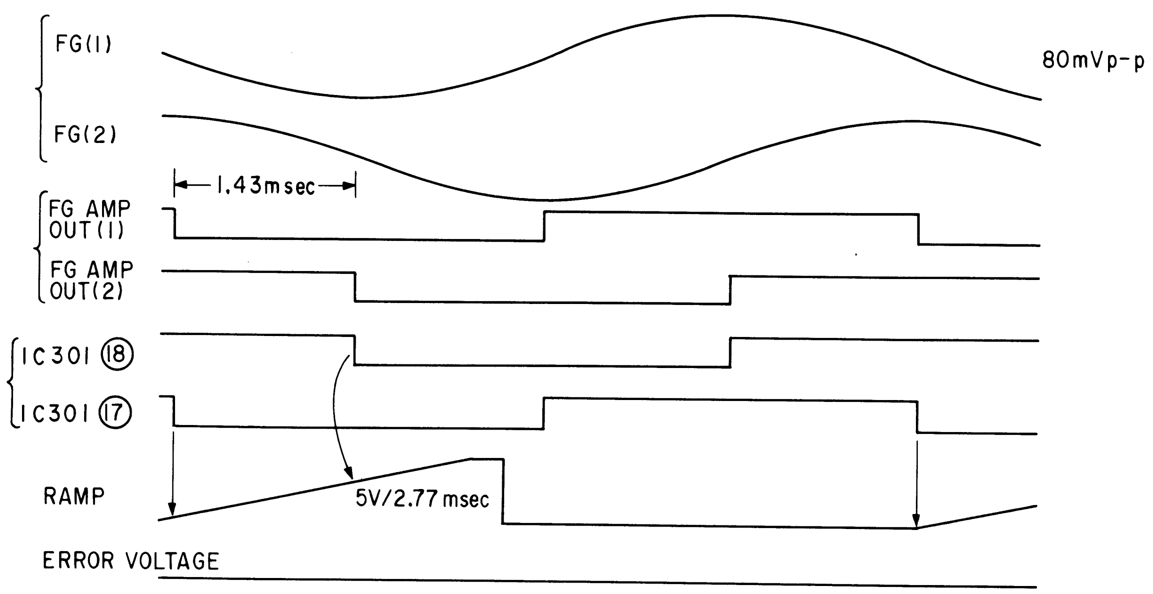
CAPSTAN PHASE SYSTEM TIMING CHART (REC)


Ref VD
Int VD
VG
TRACON IN
REC CTL
FG IN
FG MASKING (25Hz)
RAMP
5V/3.7mS
ERROR VOLTAGE

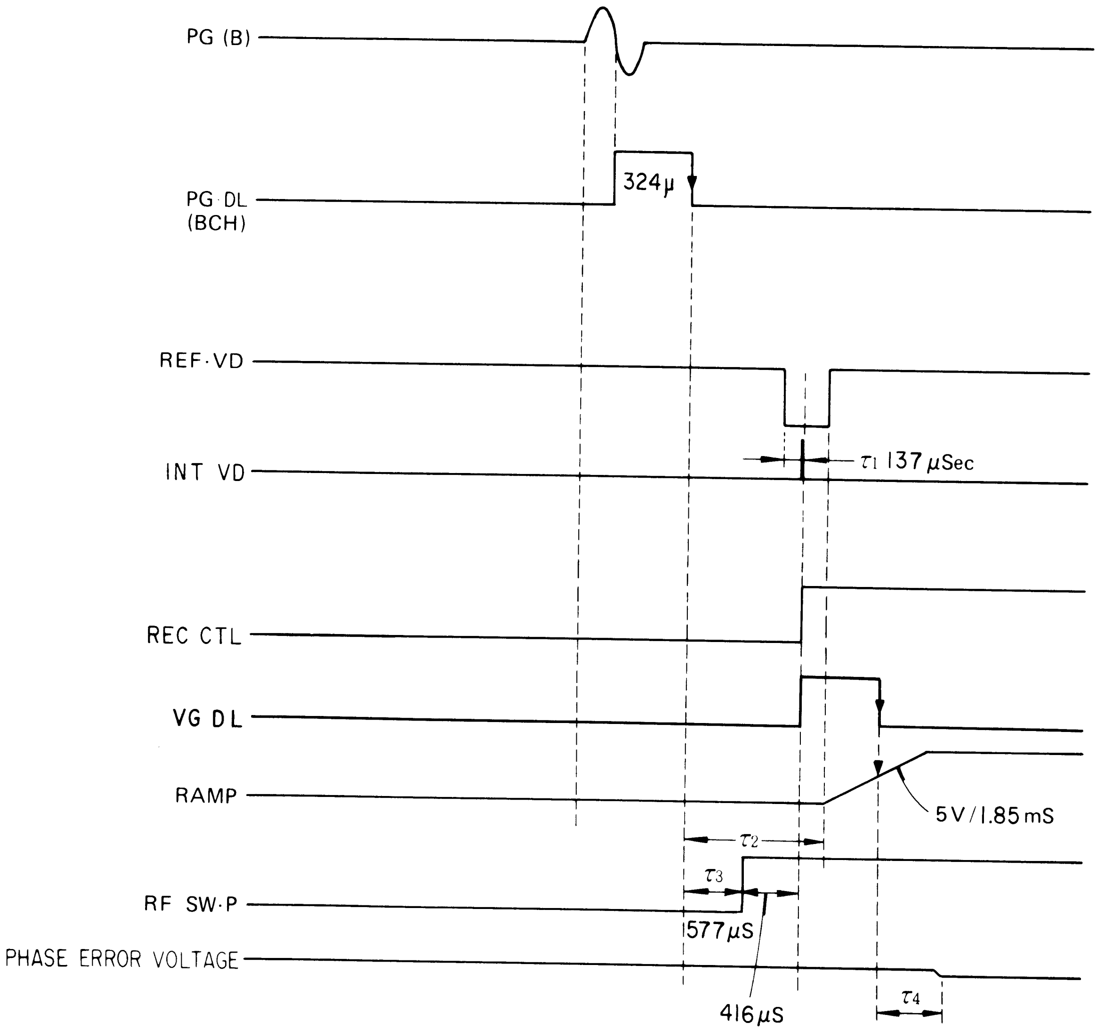
CAPSTAN PHASE SYSTEM TIMING CHART (PB)


CTL HEAD OUT
CTL AMP OUT
SCHMITT TRIGGER OUT
IC301 ⑯
VG
2.31mS
TRACON IN
EXTERNAL CR
TRCON DL
24.74mS
RAMP
5V/3.7mS
ERROR

CAPSTAN SPEED SYSTEM TIMING CHART

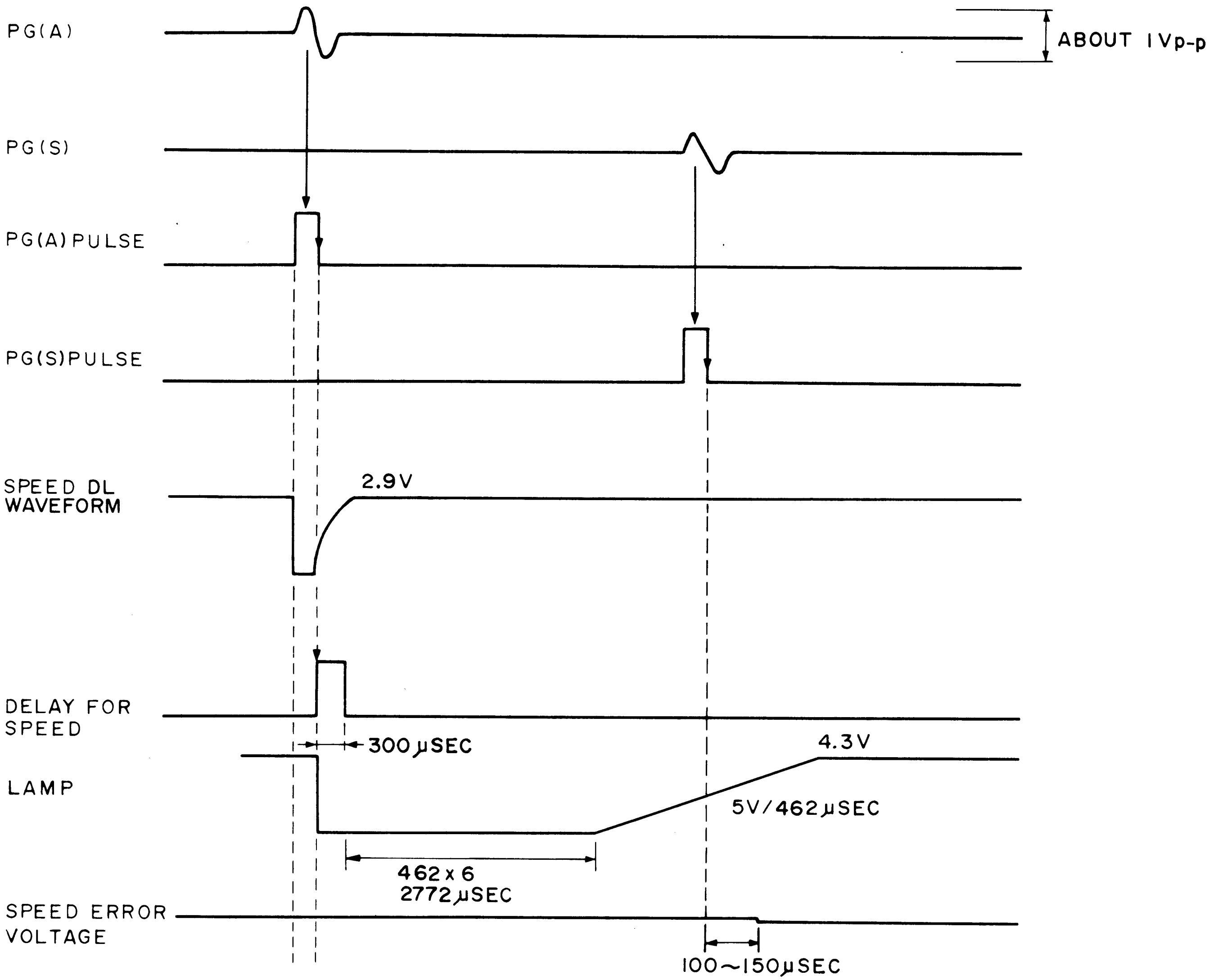

FG(1)
FG(2)
80mVp-p
1.43msec
FG AMP OUT(1)
FG AMP OUT(2)
IC301 ⑱
IC301 ⑰
RAMP
5V/2.77msec
ERROR VOLTAGE

DRUM PHASE SYSTEM TIMING CHART

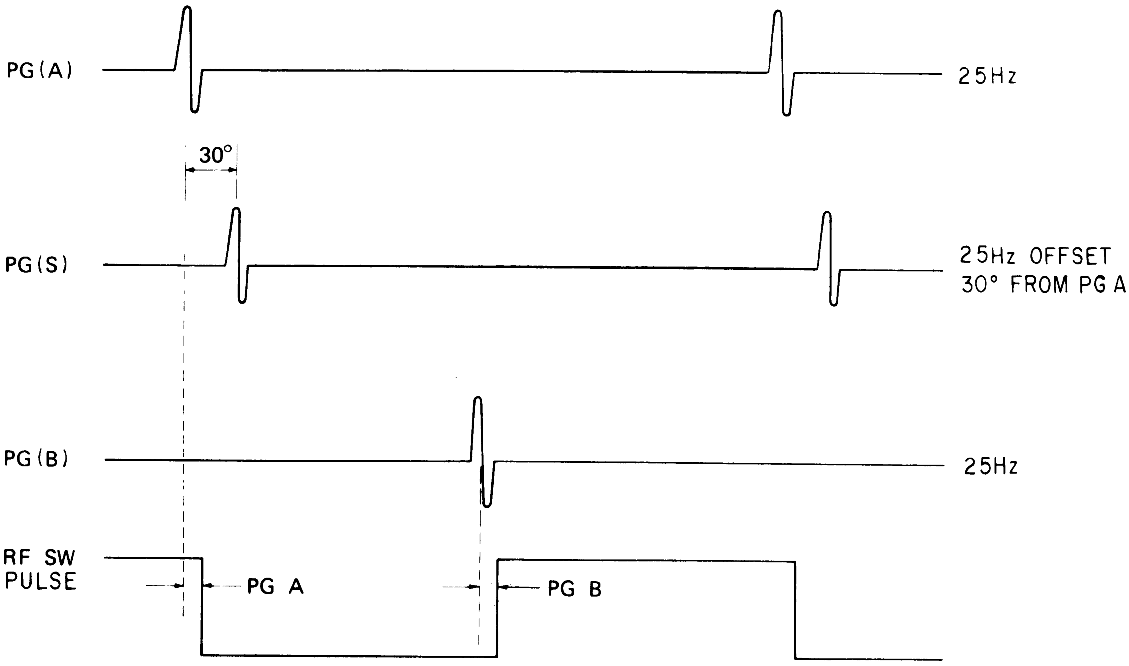

PG (B)
324μ
PG DL (BCH)
REF·VD
INT VD
τ1 137μSec
REC CTL
VG DL
RAMP
5V/1.85mS
τ2
τ3
RF SW·P
577μS
416μS
PHASE ERROR VOLTAGE
τ4

τ1 REF VD DETECTION DELAY TIME
τ2,3 DIGITAL DL
τ4 DATA EXCHANGE TIME

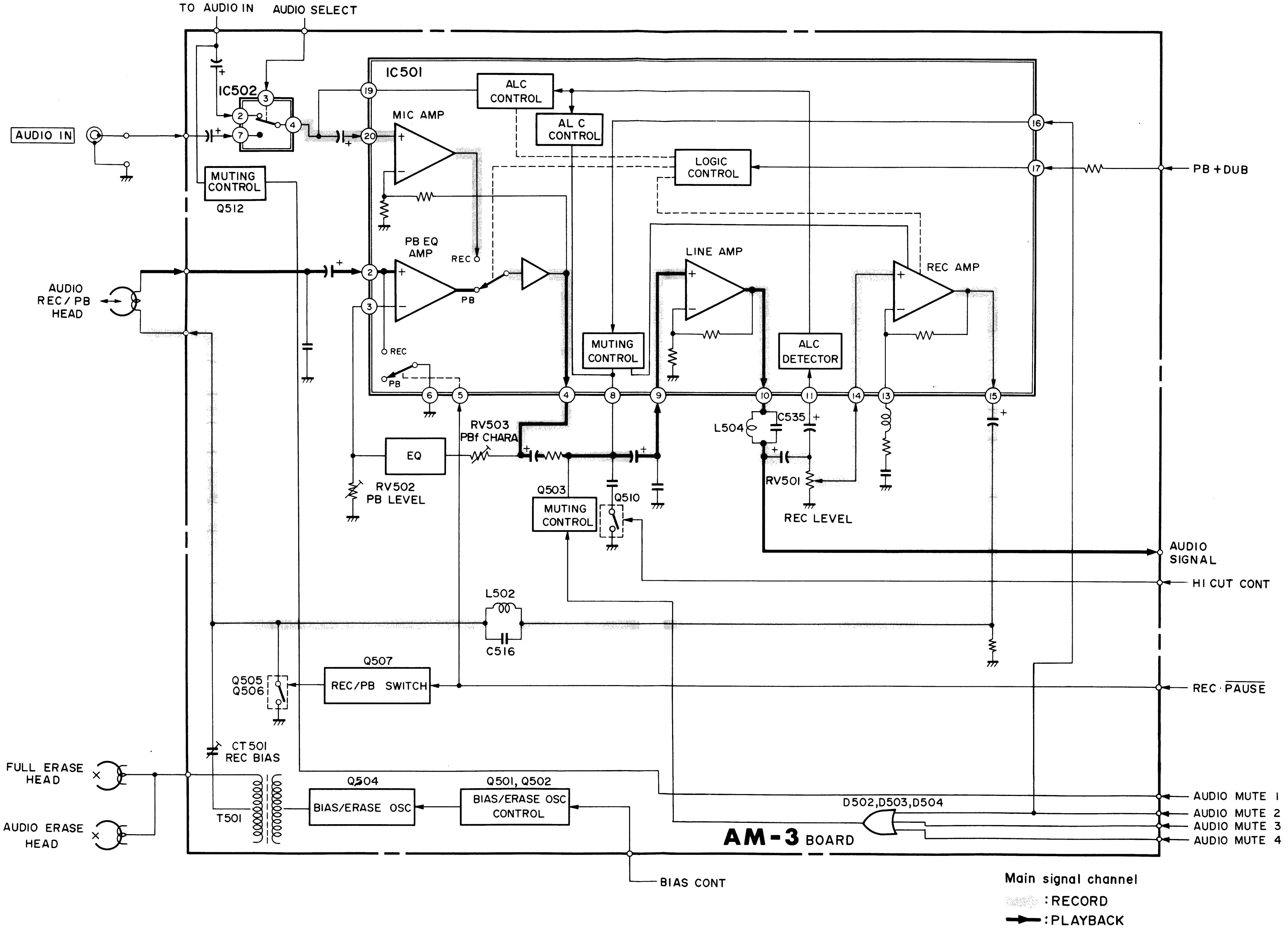
DRUM SPEED SYSTEM TIMING CHART


PG(A)
ABOUT 1Vp-p
PG(S)
PG(A) PULSE
PG(S) PULSE
SPEED DL WAVEFORM
2.9V
DELAY FOR SPEED
300μSEC
4.3V
LAMP
5V/462μSEC
462x6
2772μSEC
SPEED ERROR VOLTAGE
100~150μSEC

PG SIGNAL TIMING CHART

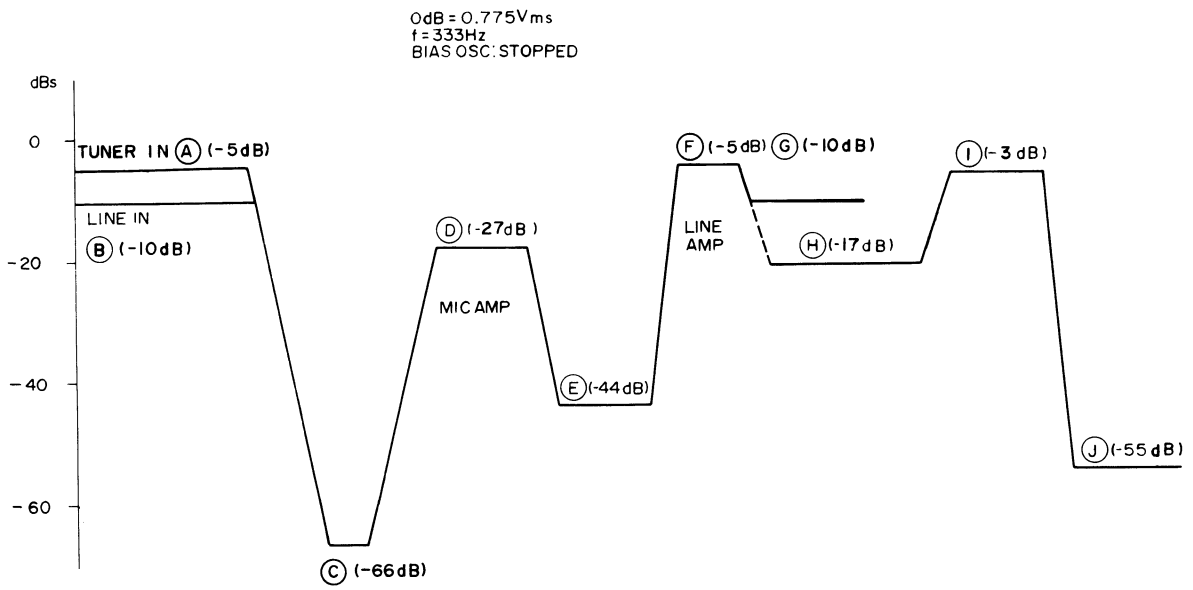

PG(A)
25Hz
30°
PG(S)
25Hz OFFSET
30° FROM PG A
PG(B)
25Hz
RF SW PULSE
PG A
PG B

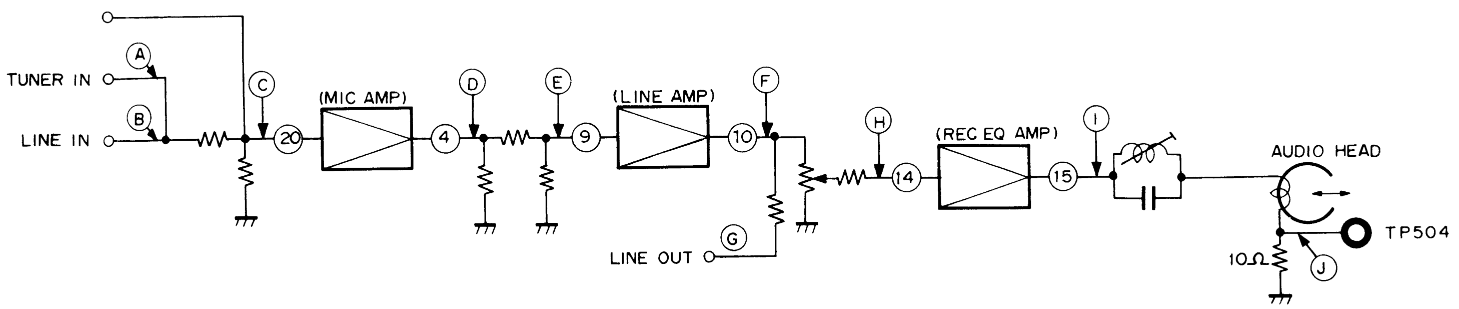
AUDIO BLOCK DIAGRAM


TO AUDIO IN
AUDIO SELECT
AUDIO IN
IC502
MUTING CONTROL
Q512
IC501
ALC CONTROL
AL C CONTROL
LOGIC CONTROL
MIC AMP
PB EQ AMP
REC
PB
LINE AMP
REC AMP
MUTING CONTROL
ALC DETECTOR
AUDIO REC / PB HEAD
PB + DUB
L504
C535
RV503 PBf CHARA
EQ
RV502 PB LEVEL
Q503
MUTING CONTROL
Q510
RV501
REC LEVEL
AUDIO SIGNAL
HI CUT CONT
L502
C516
Q507
REC/PB SWITCH
Q505
Q506
REC · PAUSE
CT501 REC BIAS
FULL ERASE HEAD
AUDIO ERASE HEAD
T501
Q504
BIAS/ERASE OSC
Q501, Q502
BIAS/ERASE OSC CONTROL
D502,D503,D504
AM-3 BOARD
AUDIO MUTE 1
AUDIO MUTE 2
AUDIO MUTE 3
AUDIO MUTE 4
BIAS CONT
Main signal channel
:RECORD
:PLAYBACK

AUDIO LEVEL DIAGRAM (REC)

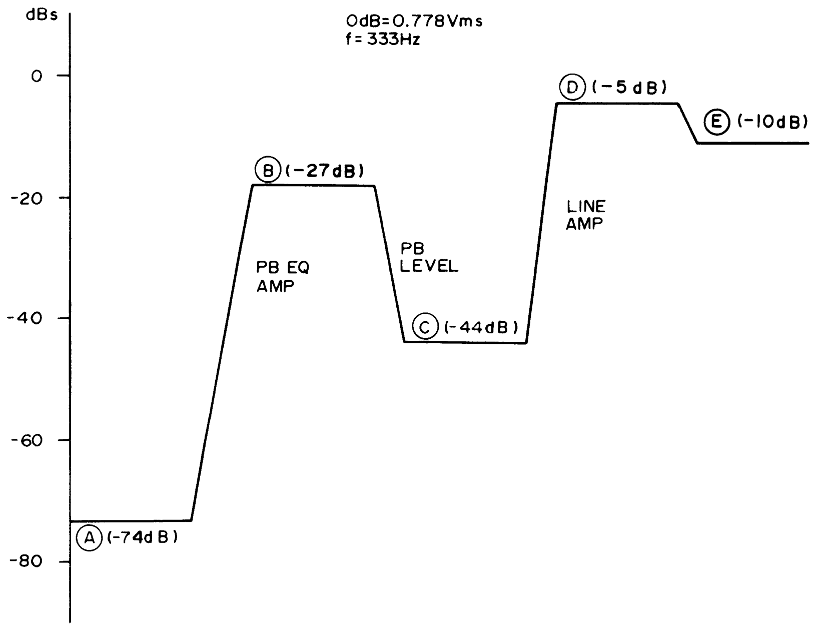
REC MODE

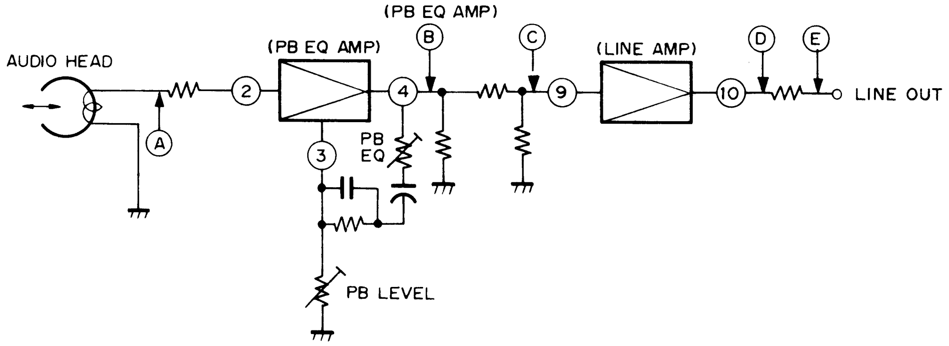



TUNER IN
LINE IN
Ⓐ
Ⓑ
Ⓒ
(MIC AMP)
20
4
Ⓓ
Ⓔ
9
(LINE AMP)
10
Ⓕ
LINE OUT
Ⓖ
Ⓗ
14
(REC EQ AMP)
15
Ⓘ
AUDIO HEAD
TP504
10Ω
Ⓙ

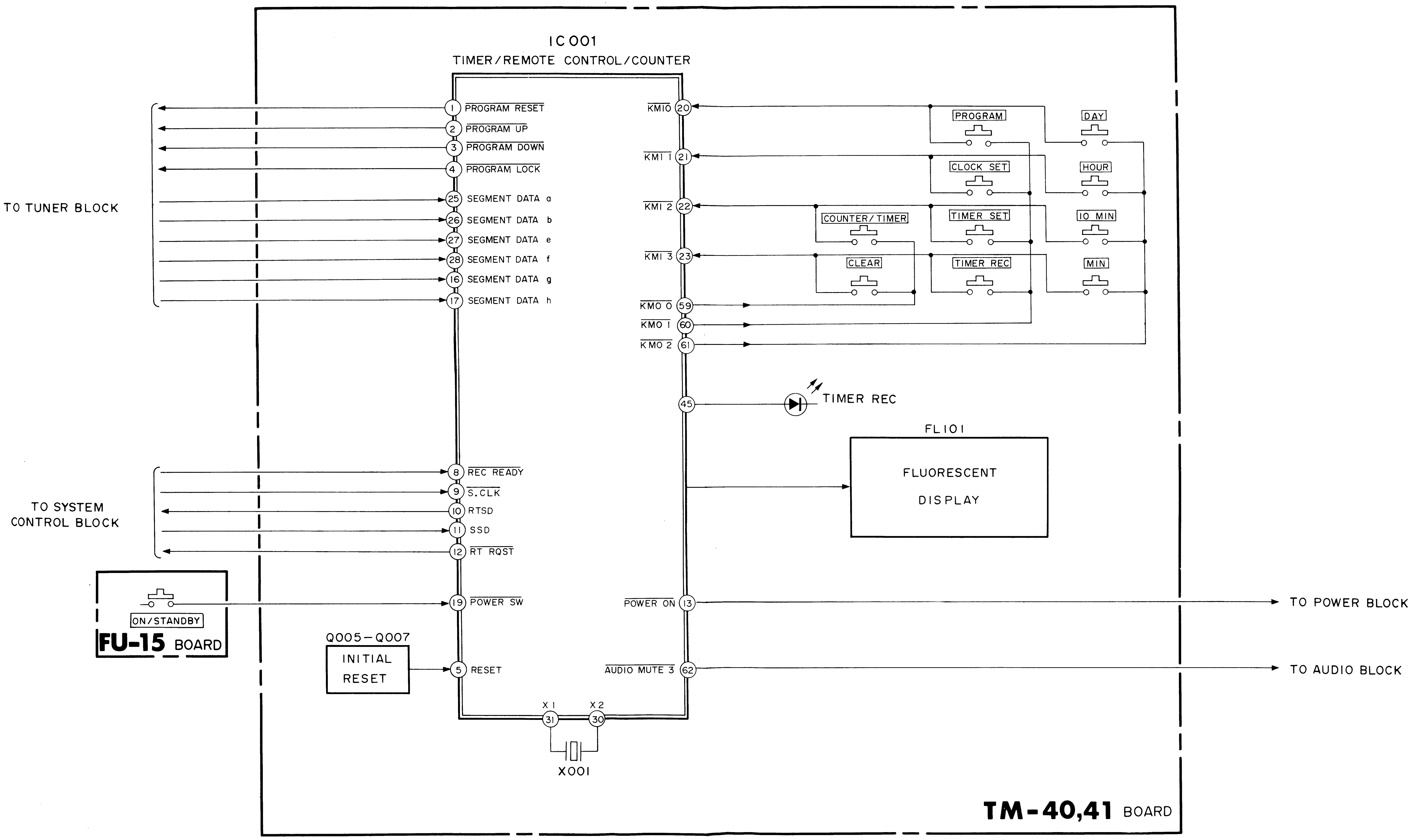
AUDIO LEVEL DIAGRAM (PB)

PB MODE

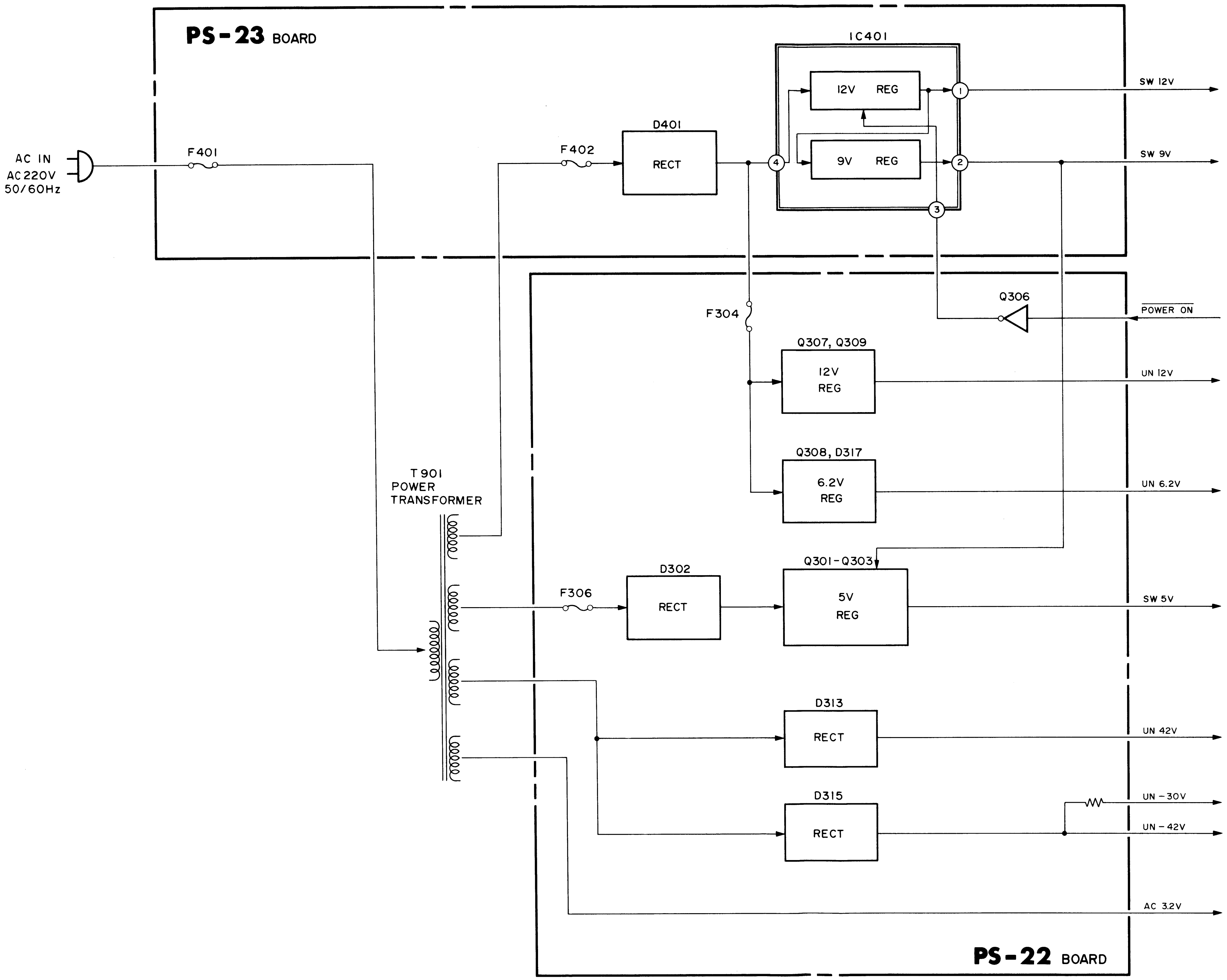



(PB EQ AMP)
AUDIO HEAD
Ⓐ
2
(PB EQ AMP)
Ⓑ
4
3
PB EQ
PB LEVEL
Ⓒ
9
(LINE AMP)
10
Ⓓ
Ⓔ
LINE OUT

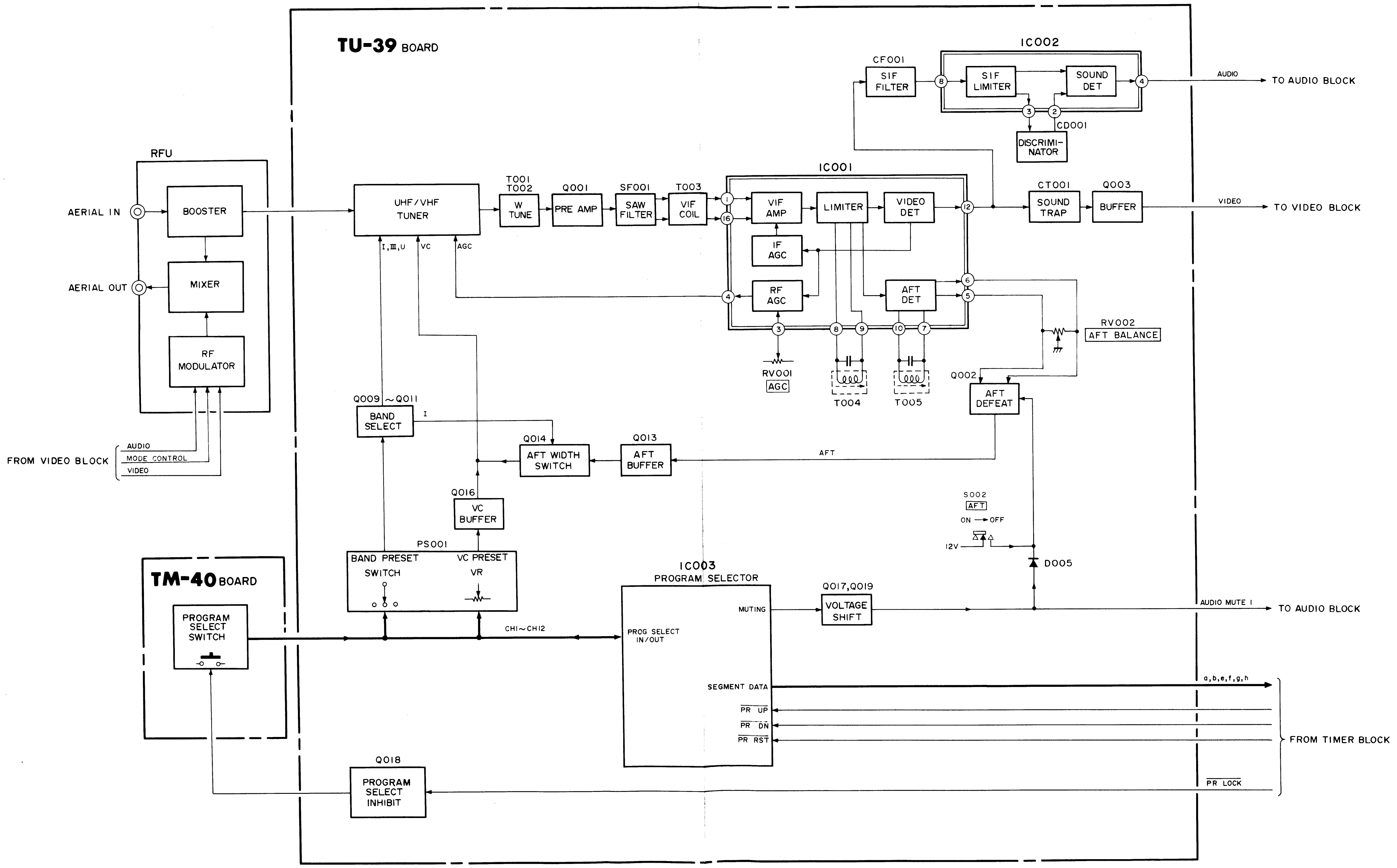
TIMER BLOCK DIAGRAM


IC001
TIMER/REMOTE CONTROL/COUNTER
TO TUNER BLOCK
1 PROGRAM RESET
2 PROGRAM UP
3 PROGRAM DOWN
4 PROGRAM LOCK
25 SEGMENT DATA a
26 SEGMENT DATA b
27 SEGMENT DATA e
28 SEGMENT DATA f
16 SEGMENT DATA g
17 SEGMENT DATA h
KMI0 20
KMI 1 21
KMI 2 22
KMI 3 23
KMO 0 59
KMO 1 60
KMO 2 61
PROGRAM
DAY
CLOCK SET
HOUR
COUNTER/TIMER
TIMER SET
10 MIN
CLEAR
TIMER REC
MIN
45
TIMER REC
FL101
FLUORESCENT DISPLAY
TO SYSTEM CONTROL BLOCK
8 REC READY
9 S.CLK
10 RTSD
11 SSD
12 RT RQST
ON/STANDBY
FU-15 BOARD
19 POWER SW
POWER ON 13
TO POWER BLOCK
Q005-Q007
INITIAL RESET
5 RESET
AUDIO MUTE 3 62
TO AUDIO BLOCK
X1 31
X2 30
X001
TM-40,41 BOARD

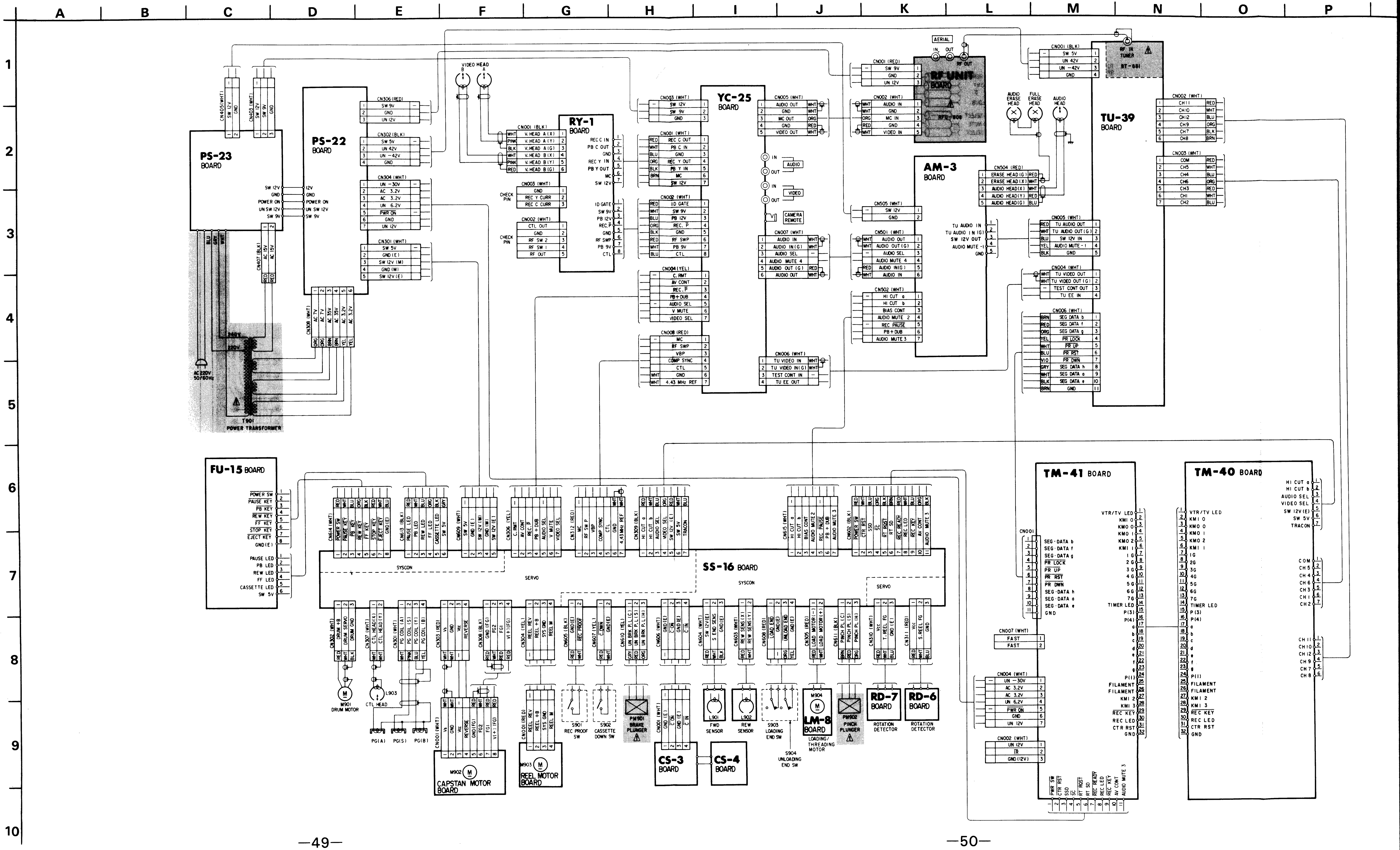
POWER SUPPLY BLOCK DIAGRAM

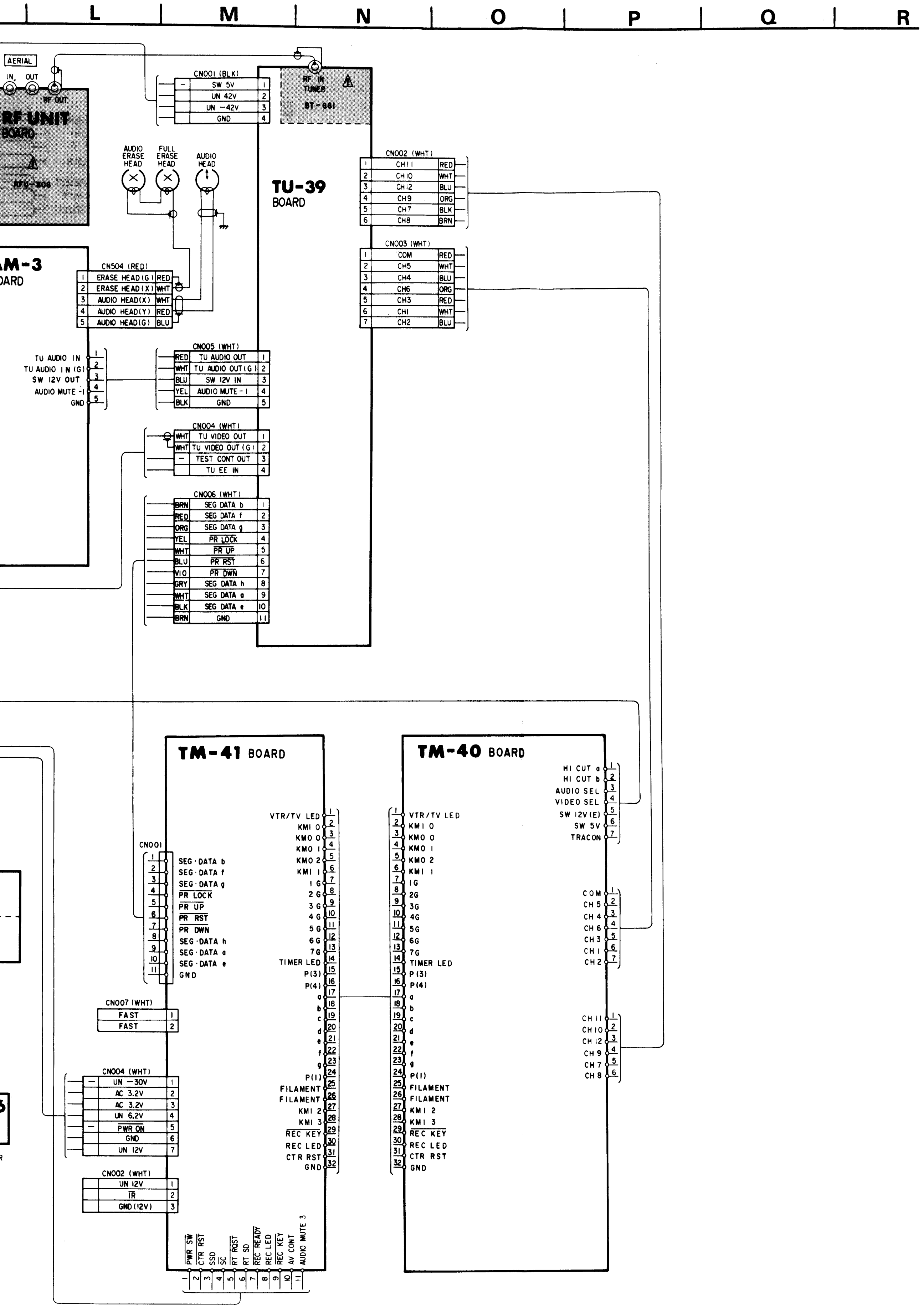

PS-23 BOARD
AC IN
AC220V
50/60Hz
F401
F402
D401
RECT
IC401
12V REG
9V REG
1
2
3
4
SW 12V
SW 9V
Q306
POWER ON
F304
Q307, Q309
12V
REG
UN 12V
Q308, D317
6.2V
REG
UN 6.2V
T901
POWER
TRANSFORMER
Q301-Q303
5V
REG
F306
D302
RECT
SW 5V
D313
RECT
UN 42V
D315
RECT
UN -30V
UN -42V
AC 3.2V
PS-22 BOARD

TUNER BLOCK DIAGRAM

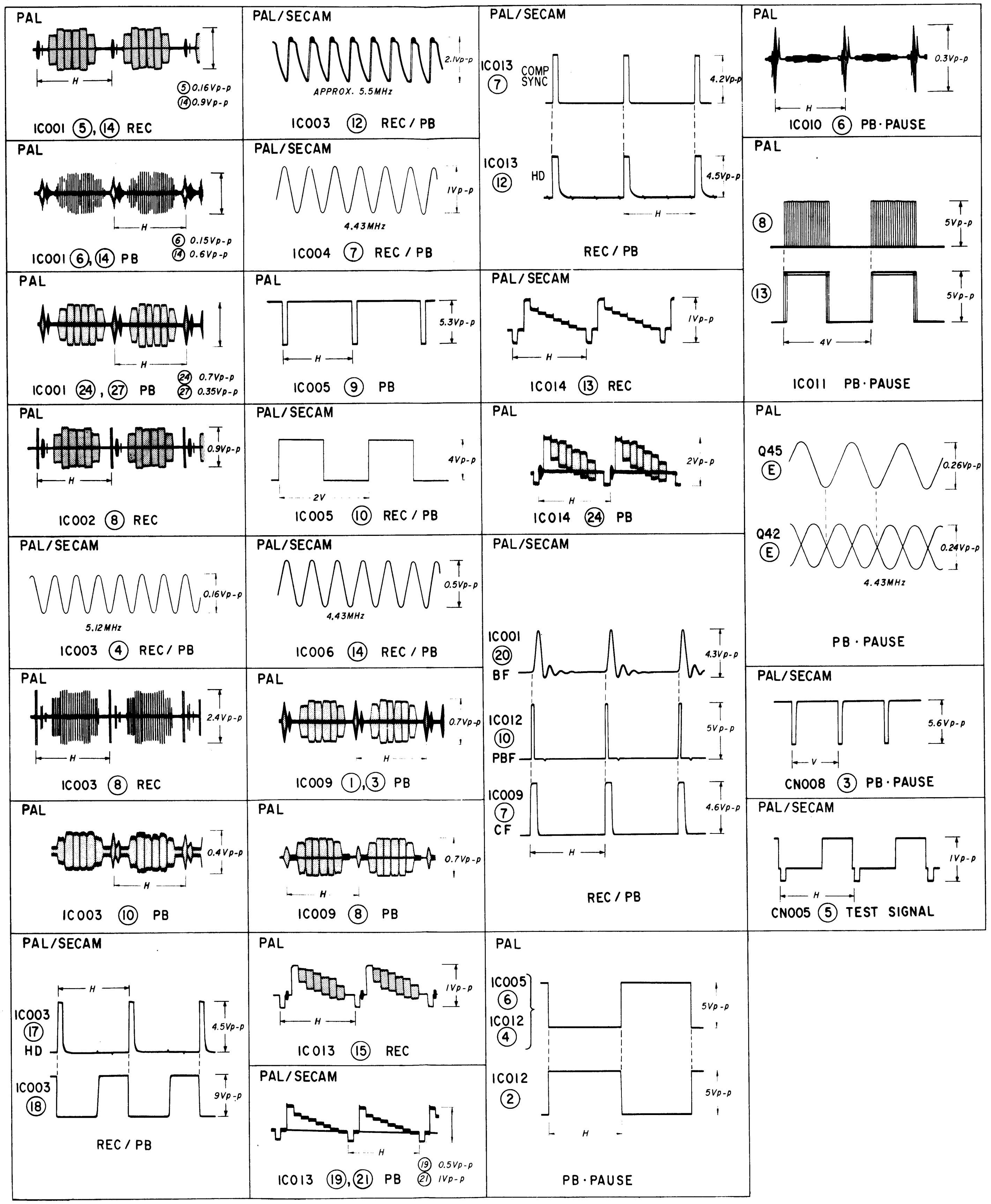

TU-39 BOARD
RFU
AERIAL IN
BOOSTER
MIXER
AERIAL OUT
RF MODULATOR
FROM VIDEO BLOCK
AUDIO
MODE CONTROL
VIDEO
UHF/VHF TUNER
I, III, U
VC
AGC
T001 T002
W TUNE
Q001
PRE AMP
SF001
SAW FILTER
T003
VIF COIL
IC001
VIF AMP
LIMITER
VIDEO DET
IF AGC
RF AGC
AFT DET
RV001
AGC
T004
T005
CF001
SIF FILTER
IC002
SIF LIMITER
SOUND DET
CD001
DISCRIMI-NATOR
AUDIO
TO AUDIO BLOCK
CT001
SOUND TRAP
Q003
BUFFER
VIDEO
TO VIDEO BLOCK
RV002
AFT BALANCE
Q002
AFT DEFEAT
Q009 ~ Q011
BAND SELECT
I
Q014
AFT WIDTH SWITCH
Q013
AFT BUFFER
AFT
Q016
VC BUFFER
PS001
BAND PRESET SWITCH
VC PRESET VR
S002
AFT
ON → OFF
12V
D005
TM-40 BOARD
PROGRAM SELECT SWITCH
CH1 ~ CH12
IC003
PROGRAM SELECTOR
MUTING
PROG SELECT IN/OUT
SEGMENT DATA
PR UP
PR DN
PR RST
Q017, Q019
VOLTAGE SHIFT
AUDIO MUTE I
TO AUDIO BLOCK
a, b, e, f, g, h
FROM TIMER BLOCK
PR LOCK
Q018
PROGRAM SELECT INHIBIT

FRAME SCHEMATIC DIAGRAM

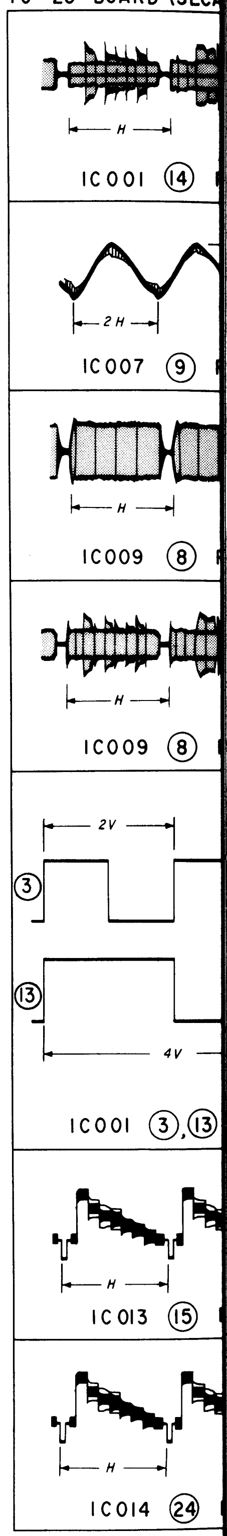

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
1
2
3
4
5
6
7
8
9
10
PS-23 BOARD
PS-22 BOARD
CN405 (WHT)
CN403 (WHT)
CN407 (BLK)
CN306 (RED)
CN302 (BLK)
CN304 (WHT)
CN301 (WHT)
CN308 (WHT)
SW 12V
GND
POWER ON
UN SW 12V
SW 9V
UN 42V
UN −42V
UN −30V
AC 3.2V
UN 6.2V
PWR ON
UN 12V
SW 5V
AC 220V 50/60Hz
240V
220V
T901 POWER TRANSFORMER
VIDEO HEAD
RY-1 BOARD
CN001 (BLK)
V. HEAD A (X)
V. HEAD A (Y)
V. HEAD A (G)
V. HEAD B (X)
V. HEAD B (Y)
V. HEAD B (G)
CN003 (WHT)
CN002 (WHT)
CHECK PIN
REC Y CURR
REC C CURR
CTL OUT
RF SW 2
RF SW 1
RF OUT
REC C IN
PB C OUT
REC Y IN
PB Y OUT
MC
ID GATE
REC P
RF SWP
PB 9V
CTL
YC-25 BOARD
CN003 (WHT)
CN001 (WHT)
CN002 (WHT)
CN004 (YEL)
CN008 (RED)
CN005 (WHT)
CN007 (WHT)
CN006 (WHT)
C. RMT
AV CONT
PB+DUB
AUDIO SEL
V MUTE
VIDEO SEL
VBP
COMP SYNC
4.43 MHz REF
AUDIO OUT
MC OUT
VIDEO OUT
AUDIO IN
AUDIO IN (G)
AUDIO MUTE 4
AUDIO OUT (G)
TU VIDEO IN
TU VIDEO IN (G)
TEST CONT IN
TU EE OUT
IN
OUT
AUDIO
VIDEO
CAMERA REMOTE
AERIAL
RF OUT
RF UNIT BOARD
RFU-908
CN001 (RED)
CN002 (WHT)
AM-3 BOARD
CN504 (RED)
CN505 (WHT)
CN501 (WHT)
CN502 (WHT)
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO HEAD
ERASE HEAD (G)
ERASE HEAD (X)
AUDIO HEAD (X)
AUDIO HEAD (Y)
AUDIO HEAD (G)
HI CUT a
HI CUT b
BIAS CONT
AUDIO MUTE 2
REC PAUSE
AUDIO MUTE 3
TU AUDIO IN
TU AUDIO IN (G)
SW 12V OUT
AUDIO MUTE −1
TU-39 BOARD
RF IN TUNER
BT-881
CN001 (BLK)
CN002 (WHT)
CN003 (WHT)
CN005 (WHT)
CN004 (WHT)
CN006 (WHT)
TU AUDIO OUT
TU AUDIO OUT (G)
SW 12V IN
AUDIO MUTE −1
TU VIDEO OUT
TU VIDEO OUT (G)
TEST CONT OUT
TU EE IN
SEG DATA b
SEG DATA f
SEG DATA g
PR LOCK
PR UP
PR RST
PR DWN
SEG DATA h
SEG DATA a
SEG DATA e
CH11
CH10
CH12
CH9
CH7
CH8
COM
CH5
CH4
CH6
CH3
CH1
CH2
FU-15 BOARD
POWER SW
PAUSE KEY
PB KEY
REW KEY
FF KEY
STOP KEY
EJECT KEY
GND (E)
PAUSE LED
PB LED
REW LED
FF LED
CASSETTE LED
SW 5V
SS-16 BOARD
SYSCON
SERVO
CN614 (WHT)
CN613 (BLK)
CN609 (WHT)
CN306 (YEL)
CN312 (WHT)
CN309 (BLK)
CN615 (WHT)
CN602 (BLK)
CN302 (WHT)
CN307 (WHT)
CN301 (WHT)
CN303 (RED)
CN308 (BLK)
CN304 (YEL)
CN605 (BLK)
CN607 (YEL)
CN610 (YEL)
CN606 (WHT)
CN604 (WHT)
CN603 (WHT)
CN608 (RED)
CN305 (RED)
CN611 (BLK)
CN310 (WHT)
CN311 (RED)
DRUM +B
DRUM SERVO
DRUM GND
CTL HEAD (X)
CTL HEAD (Y)
PG COIL (A)
PG COIL (S)
PG COIL (B)
REVERSE
FG1
FG2
REEL REV
REEL +B
SYS GND
REEL M
REC PROOF
C.DWN
UN BRK P.L (C)
UN BRK P.L (S)
UN BRK P.L (H)
C IN
S END SENS
T END SENS
REW SENS (X)
REW SENS (Y)
LOAD END
UNLOAD END
LOAD MOTOR (−)
LOAD MOTOR (+)
PINCH PL (C)
PINCH PL (S)
PINCH PL (H)
T. REEL FG
S. REEL FG
M901 DRUM MOTOR
L903 CTL HEAD
PG(A)
PG(S)
PG(B)
CN001 (WHT)
M902 CAPSTAN MOTOR BOARD
CN001 (RED)
M903 REEL MOTOR BOARD
S901 REC PROOF SW
S902 CASSETTE DOWN SW
PM901 BRAKE PLUNGER
CS-3 BOARD
CS-4 BOARD
L901 FWD SENSOR
L902 REW SENSOR
S903 LOADING END SW
S904 UNLOADING END SW
M904 LM-8 BOARD
LOADING/THREADING MOTOR
PM902 PINCH PLUNGER
RD-7 BOARD
RD-6 BOARD
ROTATION DETECTOR
TM-41 BOARD
CN001
CN007 (WHT)
FAST
CN004 (WHT)
CN002 (WHT)
IR
GND (12V)
VTR/TV LED
KMI 0
KMO 0
KMI 1
KMO 1
KMO 2
KMI 2
KMI 3
1G
2G
3G
4G
5G
6G
7G
TIMER LED
P(3)
P(4)
P(1)
FILAMENT
REC KEY
REC LED
CTR RST
PWR SW
SSD
SC
RT RST
RT SD
REC READY
TM-40 BOARD
HI CUT a
HI CUT b
AUDIO SEL
VIDEO SEL
SW 12V (E)
TRACON


AERIAL
IN OUT
RF OUT
RF UNIT BOARD
RFU-808
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO HEAD
AM-3 BOARD
CN504 (RED)
1 ERASE HEAD (G) RED
2 ERASE HEAD (X) WHT
3 AUDIO HEAD (X) WHT
4 AUDIO HEAD (Y) RED
5 AUDIO HEAD (G) BLU
TU AUDIO IN
TU AUDIO IN (G)
SW 12V OUT
AUDIO MUTE-1
GND
CN001 (BLK)
1 SW 5V
2 UN 42V
3 UN -42V
4 GND
RF IN
TUNER
BT-881
TU-39 BOARD
CN002 (WHT)
1 CH11 RED
2 CH10 WHT
3 CH12 BLU
4 CH9 ORG
5 CH7 BLK
6 CH8 BRN
CN003 (WHT)
1 COM RED
2 CH5 WHT
3 CH4 BLU
4 CH6 ORG
5 CH3 RED
6 CH1 WHT
7 CH2 BLU
CN005 (WHT)
RED TU AUDIO OUT 1
WHT TU AUDIO OUT (G) 2
BLU SW 12V IN 3
YEL AUDIO MUTE-1 4
BLK GND 5
CN004 (WHT)
WHT TU VIDEO OUT 1
WHT TU VIDEO OUT (G) 2
TEST CONT OUT 3
TU EE IN 4
CN006 (WHT)
BRN SEG DATA b 1
RED SEG DATA f 2
ORG SEG DATA g 3
YEL PR LOCK 4
WHT PR UP 5
BLU PR RST 6
VIO PR DWN 7
GRY SEG DATA h 8
WHT SEG DATA a 9
BLK SEG DATA e 10
BRN GND 11
TM-41 BOARD
CN001
SEG·DATA b
SEG·DATA f
SEG·DATA g
PR LOCK
PR UP
PR RST
PR DWN
SEG·DATA h
SEG·DATA a
SEG·DATA e
GND
VTR/TV LED
KMI 0
KMO 0
KMO 1
KMO 2
KMI 1
1G
2G
3G
4G
5G
6G
7G
TIMER LED
P(3)
P(4)
a b c d e f g
P(1)
FILAMENT
FILAMENT
KMI 2
KMI 3
REC KEY
REC LED
CTR RST
GND
CN007 (WHT)
FAST 1
FAST 2
CN004 (WHT)
UN -30V 1
AC 3.2V 2
AC 3.2V 3
UN 6.2V 4
PWR ON 5
GND 6
UN 12V 7
CN002 (WHT)
UN 12V 1
IR 2
GND (12V) 3
PWR SW
CTR RST
SSD
SC
RT RGST
RT SD
REC READY
REC LED
REC KEY
AV CONT
AUDIO MUTE 3
TM-40 BOARD
VTR/TV LED
KMI 0
KMO 0
KMO 1
KMO 2
KMI 1
1G 2G 3G 4G 5G 6G 7G
TIMER LED
P(3)
P(4)
a b c d e f g
P(1)
FILAMENT
FILAMENT
KMI 2
KMI 3
REC KEY
REC LED
CTR RST
GND
HI CUT a
HI CUT b
AUDIO SEL
VIDEO SEL
SW 12V (E)
SW 5V
TRACON
COM
CH5
CH4
CH6
CH3
CH1
CH2
CH11
CH10
CH12
CH9
CH7
CH8

YC-25 BOARD (PAL/SECAM)

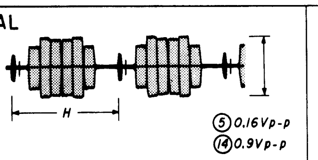


YC-25 BOARD (SECA



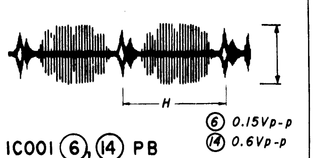
-25 BOARD (PAL/SECAM)

AL



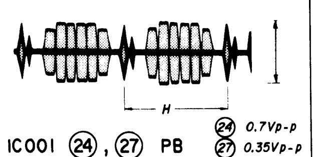
IC001 ⑤, ⑭ REC

AL



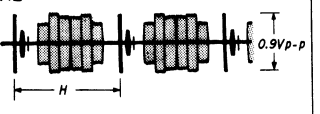
IC001 ⑥, ⑭ PB

AL



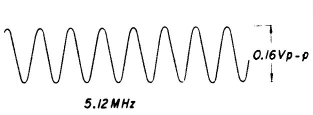
IC001 ㉔, ㉗ PB

AL



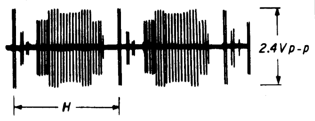
IC002 ⑧ REC

AL/SECAM



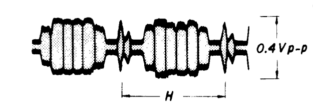
IC003 ④ REC/PB

PAL



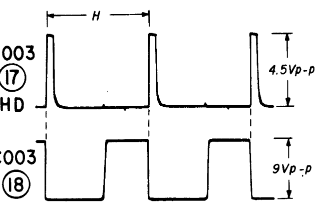
IC003 ⑧ REC

PAL



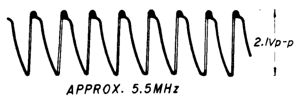
IC003 ⑩ PB

PAL/SECAM



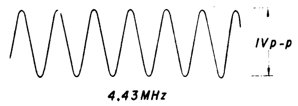
REC/PB

PAL/SECAM



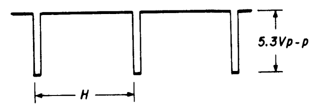
IC003 ⑫ REC/PB

PAL/SECAM



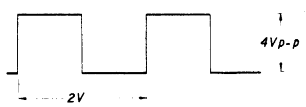
IC004 ⑦ REC/PB

PAL



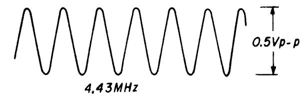
IC005 ⑨ PB

PAL/SECAM



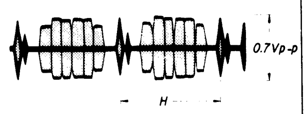
IC005 ⑩ REC/PB

PAL/SECAM



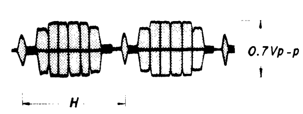
IC006 ⑭ REC/PB

PAL



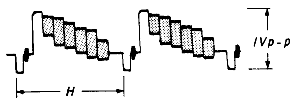
IC009 ①,③ PB

PAL



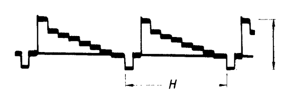
IC009 ⑧ PB

PAL



IC013 ⑮ REC

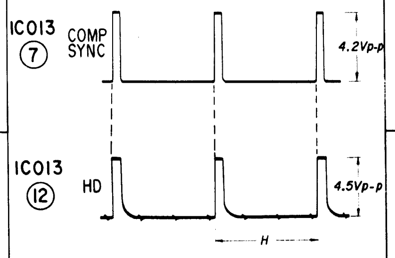
PAL/SECAM



⑲ 0.5Vp-p
㉑ 1Vp-p

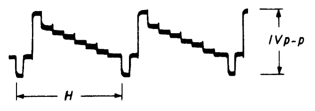
IC013 ⑲,㉑ PB

PAL/SECAM



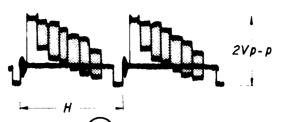
REC/PB

PAL/SECAM



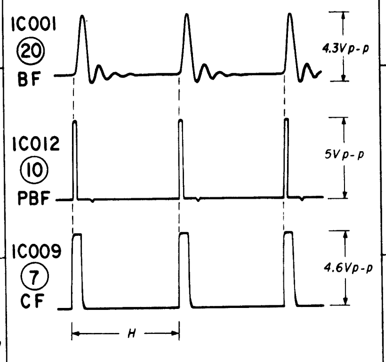
IC014 ⑬ REC

PAL



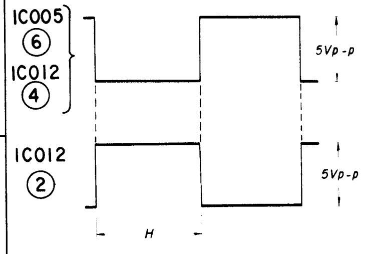
IC014 ㉔ PB

PAL/SECAM



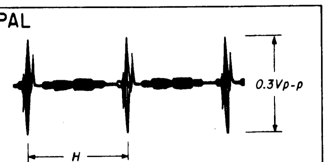
REC/PB

PAL



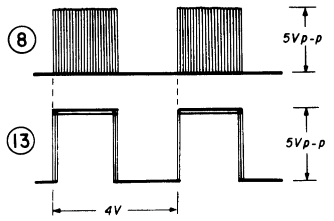
PB·PAUSE

PAL



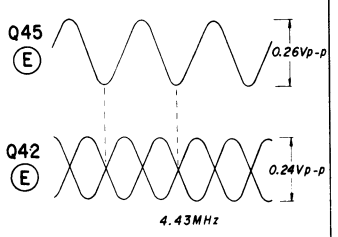
IC010 ⑥ PB·PAUSE

PAL



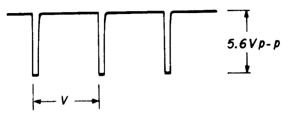
IC011 PB·PAUSE

PAL



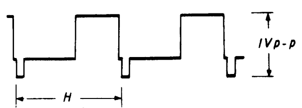
PB·PAUSE

PAL/SECAM



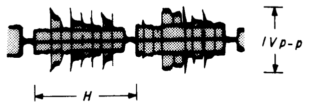
CN008 ③ PB·PAUSE

PAL/SECAM

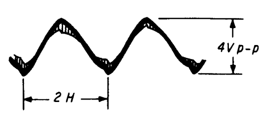


CN005 ⑤ TEST SIGNAL

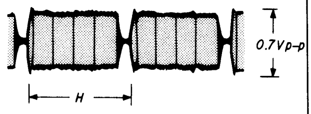
YC-25 BOARD (SECAM)



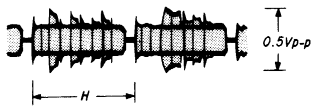
IC001 ⑭ REC



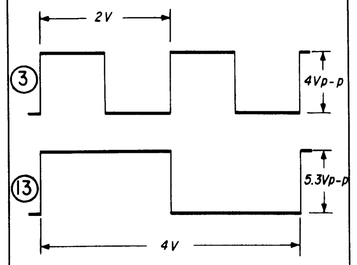
IC007 ⑨ REC/PB



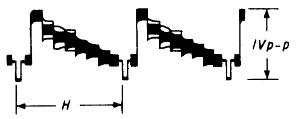
IC009 ⑧ REC



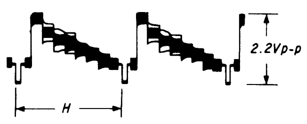
IC009 ⑧ PB



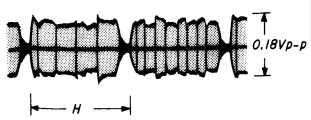
IC001 ③,⑬ REC/PB



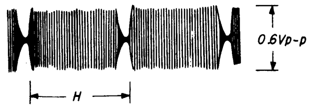
IC013 ⑮ REC



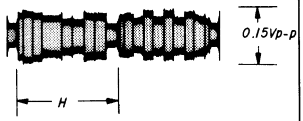
IC014 ㉔ PB



Q015 Ⓔ PB



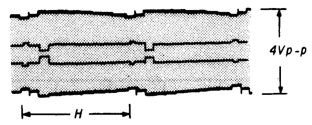
CN001 ① REC



CN001 ② PB

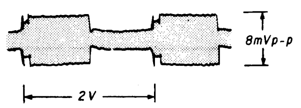
RY-1 BOARD (PAL/SECAM)

PAL/SECAM



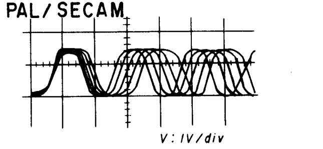
IC1 ⑤, ⑪ REC

PAL/SECAM



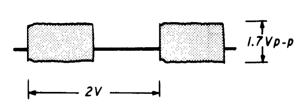
IC1 ⑯, ㉗ PB

PAL/SECAM



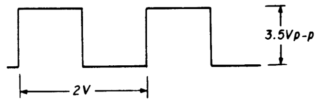
IC2 ④ PB

PAL/SECAM



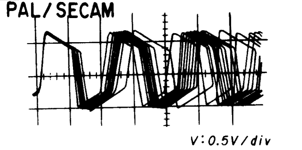
IC2 ⑯, ⑰ PB

PAL/SECAM



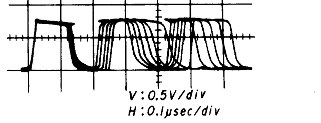
IC2 ⑱ PB

PAL/SECAM



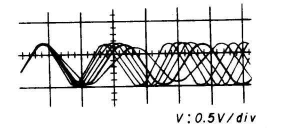
IC3 ④ REC

PAL/SECAM



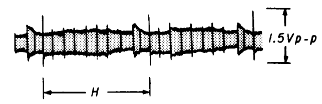
IC3 ⑯ PB

PAL/SECAM



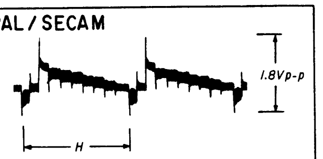
IC4 ① PB

PAL/SECAM



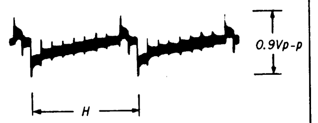
IC4 ④ PB

PAL/SECAM



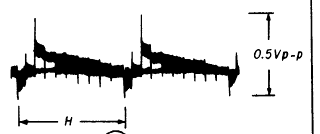
IC4 ⑤ PB

PAL/SECAM



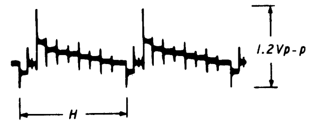
IC4 ⑨ PB

PAL/SECAM



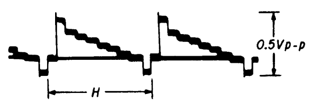
IC4 ⑫ PB

PAL/SECAM



Q15 Ⓒ REC

PAL/SECAM



CN5 ⑤ PB

IC 002

MODE \ PIN	1	2	3	4	5	6	7	8	9
SECAM REC	6.2	4.5	6.2	0	GND	6.2	GND	5.4	9
SECAM PB	6.2	0	6.2	0	GND	6.2	GND	5.4	9

IC 005

MODE \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SECAM REC	0.1	—	GND	—	—	2.7	—	—	5	2.1	2.5	GND	2.7	5.3
SECAM PB	4.5	—	GND	—	—	2.7	—	—	5.3	2.2	2.5	GND	2.7	5.4

IC 007

MODE \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
SECAM REC	4.4	0.2	5.5	GND	—	—	4.5	0	4.7	—	4.7	4.7	—	4.7	8.3	9
SECAM PB	4.5	0.2	5.6	GND	—	—	4.5	0	4.7	—	4.7	4.7	—	4.7	8.3	9

IC 008

MODE \ PIN	1	2	3	4	5	6	7	8	9
SECAM REC	6.2	0.8	6.1	0.2	GND	6.1	GND	5.4	9
SECAM PB	6.2	0.8	6.1	4.6	GND	6.2	GND	5.4	9

IC 009

MODE \ PIN	1	2	3	4	5	6	7	8	9
SECAM REC	6.1	2.1	6.1	2.6	GND	6.1	0.4	5.3	9
SECAM PB	6.1	2.6	6.1	2	GND	6.1	0.4	5.3	9

IC 010

MODE \ PIN	1	2	3	4	5	6	7	8	9
SECAM REC	9	—	—	—	GND	2.7	2	0.7	9
SECAM PB	9	—	—	—	GND	2.7	2	0.7	9

IC 011

MODE \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SECAM REC	2.6	2.9	2	0.8	2.9	GND	GND	0	GND	0	—	2.2	3	5.3
SECAM PB	2.8	2.4	2.2	0.8	2.4	GND	GND	0	GND	0	—	3	2.2	5.4

MODE \ Q	4			10			11			12			17			18			22		
	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
SECAM REC	0.4	0.1	GND	3.1	4.8	2.4	7.9	2.3	8.5	2.9	8.5	2.3	0.6	0	GND	0	4.5	GND	0.6	0	GND
SECAM PB	0.4	4.5	GND	3.1	4.8	2.4	7.9	2.3	8.5	2.9	8.5	2.3	0.6	0	GND	0.6	0	GND	0.6	0	GND

23			31			32			33			34			35			36		
B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
0.2	0.2	GND	0.7	0	GND	0.6	0	GND	7.6	1.6	8.2	1.6	7.8	1.2	7.8	GND	8.2	1.6	GND	1.9
0 2	4.6	GND	0.7	0	GND	0.6	0	GND	7.8	1.4	8.3	1.4	8.1	0.9	8.1	GND	8.3	1.4	GND	2.1

37			38			69		
B	C	E	B	C	E	B	C	E
5.3	0	5.3	5.3	0	5.3	0.2	GND	0.8
5.3	0	5.4	5.3	0	5.4	0.2	GND	0.8

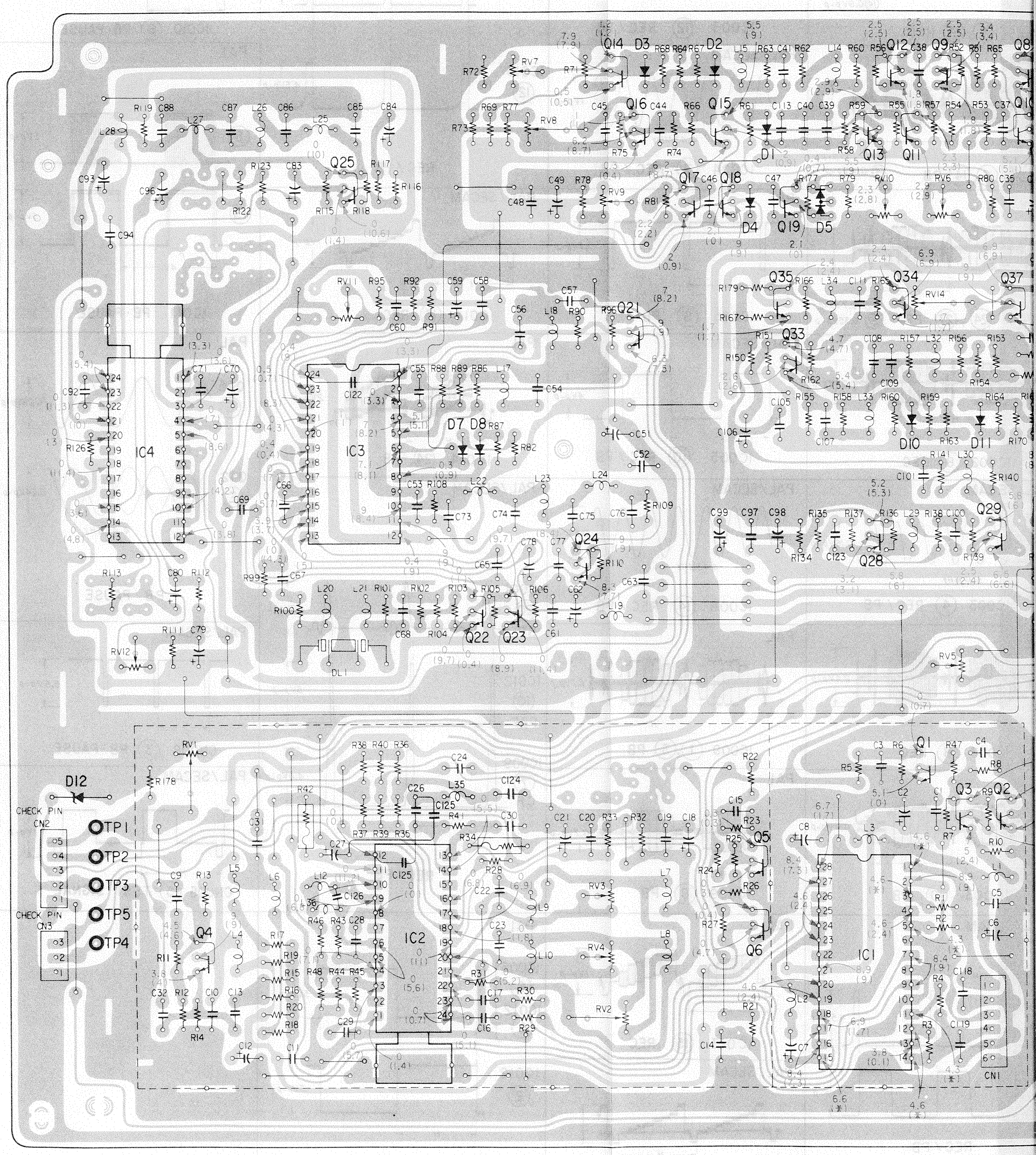
YC-25 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS) RY-1 (LOW CONVERTED CHROMA & Y-FM SIGNALS, RECORD/PLAYBACK AMP)

A B C D E F G H I J

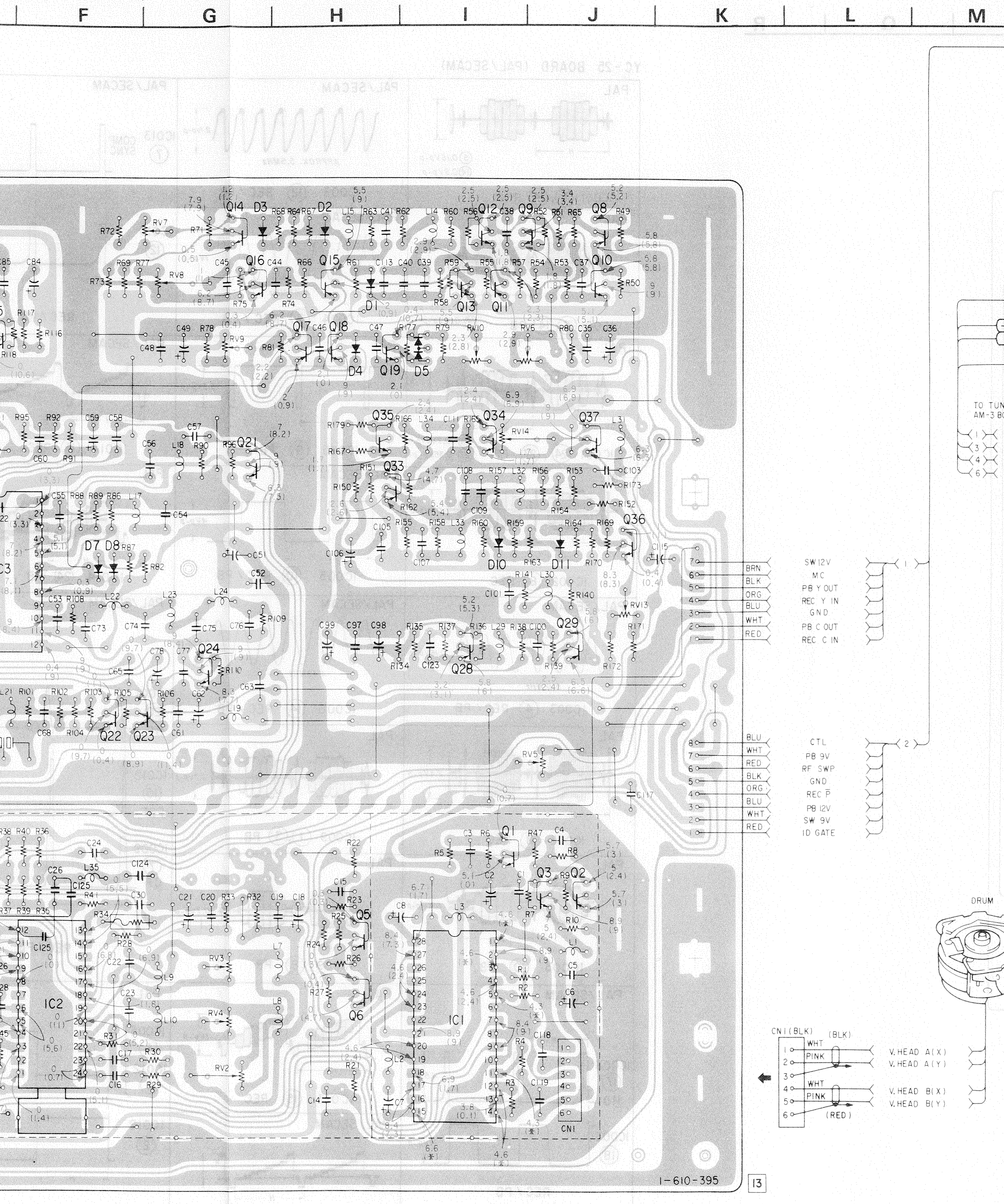
– Ref. No. YC-25 BOARD: 1000 series, RY-1 BOARD: 2000 series –

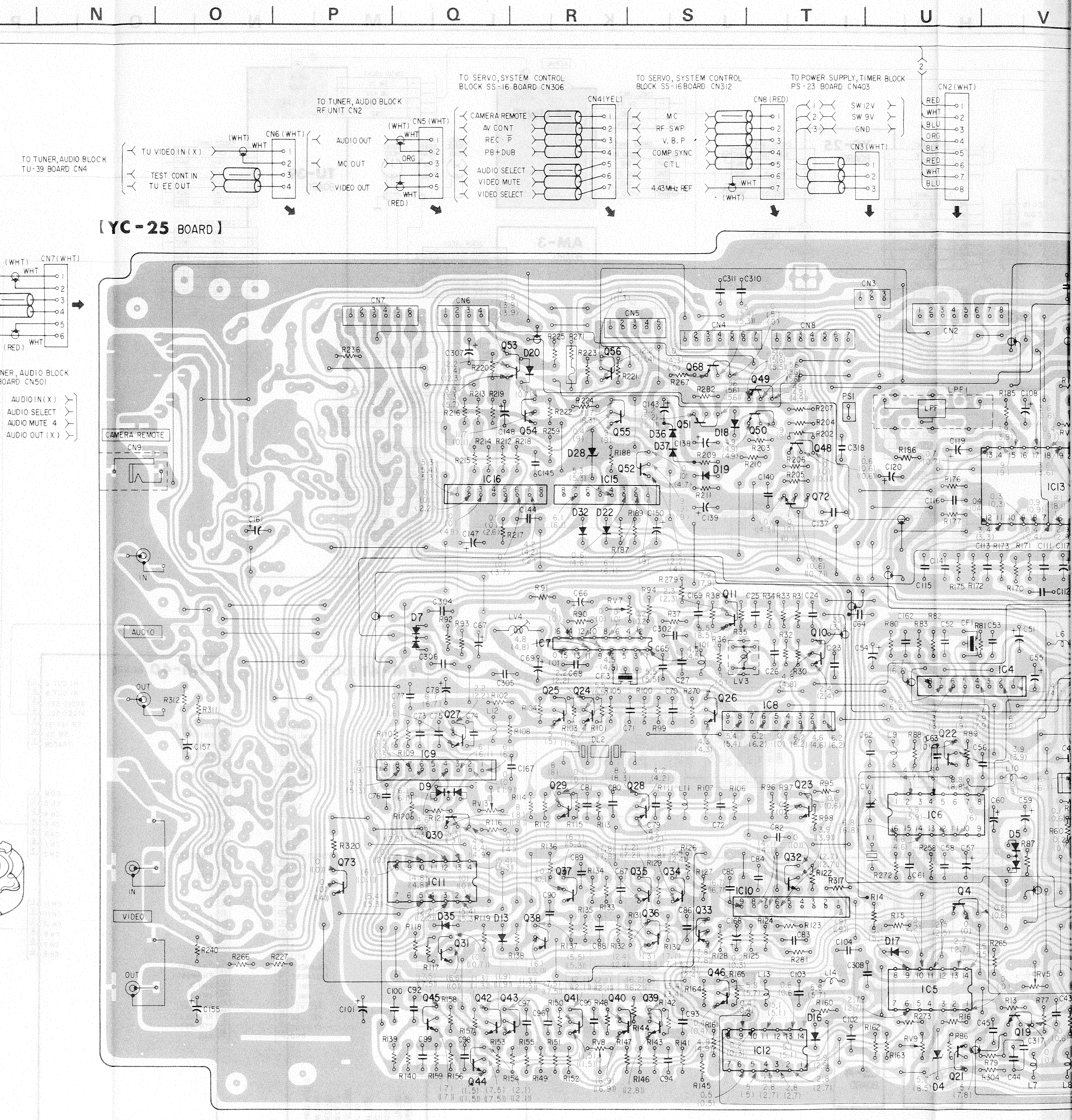
IC·Q	D	RV·TP
14 12 9 8	3,2	RV7
16 15 13,11 10		
	1	RV8
25 17,18 19	4,5	
		RV10,RV6
		RV9
35 34 37		RV14
33		
21		RV11
36	10 11	
	7,8	
IC4 IC3		
		RV13
28 29		
24		
22 23		
		RV12 RV5
1		RV1
3,2		
	12	
5		1
		2
		3
		RV3
6		5
IC2 IC1		4
4		
		RV4
		RV2

[RY-1 BOARD]

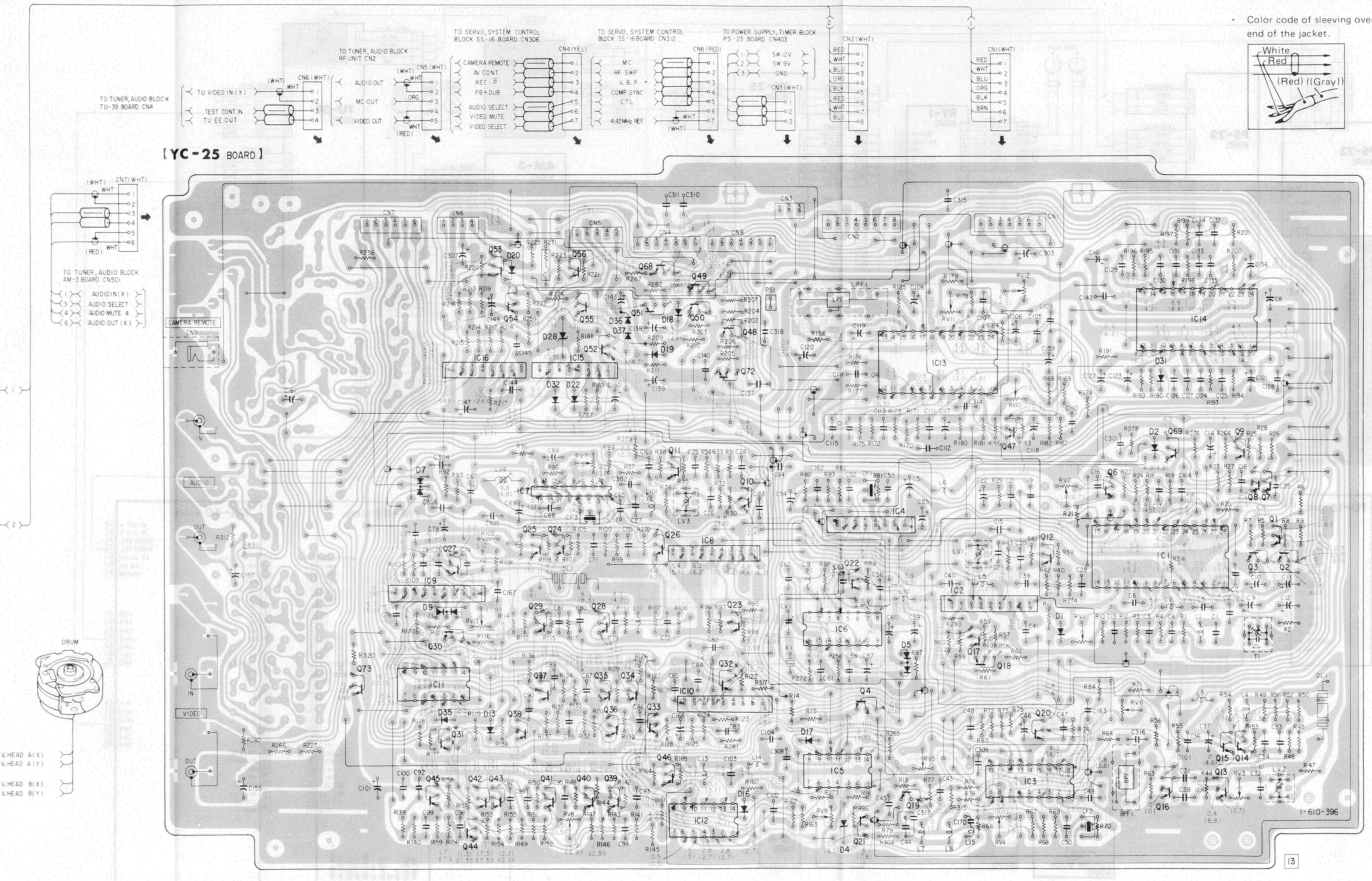

CHECK PIN CN2
TP1
TP2
TP3
TP5
TP4
CHECK PIN CN3
D12
IC1
IC2
IC3
IC4
CN1
DL1
Q1
Q2
Q3
Q4
Q5
Q6
Q9
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
Q21
Q22
Q23
Q24
Q25
Q28
Q29
Q33
Q34
Q35
Q37
D1
D2
D3
D4
D5
D7
D8
D10
D11
RV1
RV2
RV3
RV4
RV5
RV6
RV7
RV8
RV9
RV10
RV11
RV12
RV14

ROMA &
RD/PLAYBACK AMP)


F
G
H
I
J
K
L
M
1-610-395
13
SW 12V
MC
PB Y OUT
REC Y IN
GND
PB C OUT
REC C IN
CTL
PB 9V
RF SWP
GND
REC P̄
PB 12V
SW 9V
ID GATE
BRN
BLK
ORG
BLU
WHT
RED
CN1 (BLK)
WHT
PINK
V. HEAD A (X)
V. HEAD A (Y)
V. HEAD B (X)
V. HEAD B (Y)
DRUM
IC1
IC2
CN1


N
O
P
Q
R
S
T
U
V
[YC-25 BOARD]
TO TUNER, AUDIO BLOCK TU-39 BOARD CN4
TU VIDEO IN (X)
TEST CONT IN
TU EE OUT
CN6 (WHT)
TO TUNER, AUDIO BLOCK RF UNIT CN2
AUDIO OUT
MC OUT
VIDEO OUT
CN5 (WHT)
TO SERVO, SYSTEM CONTROL BLOCK SS-16 BOARD CN306
CN4 (YEL)
CAMERA REMOTE
AV CONT
REC P̄
PB+DUB
AUDIO SELECT
VIDEO MUTE
VIDEO SELECT
TO SERVO, SYSTEM CONTROL BLOCK SS-16 BOARD CN312
MC
RF SWP
V. B. P
COMP SYNC
CTL
4.43MHz REF
CN8 (RED)
TO POWER SUPPLY, TIMER BLOCK PS-23 BOARD CN403
SW 12V
SW 9V
GND
CN3 (WHT)
CN2 (WHT)
CN7 (WHT)
TO TUNER, AUDIO BLOCK AM-3 BOARD CN501
AUDIO IN (X)
AUDIO SELECT
AUDIO MUTE 4
AUDIO OUT (X)
CAMERA REMOTE
CN9
AUDIO
VIDEO
IN
OUT

M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | A1 | B1


[YC-25 BOARD]
TO TUNER, AUDIO BLOCK TU-39 BOARD CN4
TU VIDEO IN (X)
TEST CONT IN
TU EE OUT
CN6 (WHT)
TO TUNER, AUDIO BLOCK RF UNIT CN2
AUDIO OUT
MC OUT
VIDEO OUT
CN5 (WHT)
TO SERVO, SYSTEM CONTROL BLOCK SS-16 BOARD CN306
CAMERA REMOTE
AV CONT
REC · P
PB+DUB
AUDIO SELECT
VIDEO MUTE
VIDEO SELECT
CN4 (YEL)
TO SERVO, SYSTEM CONTROL BLOCK SS-16 BOARD CN312
MC
RF SWP
V. B. P
COMP SYNC
CTL
4.43MHz REF
CN8 (RED)
TO POWER SUPPLY, TIMER BLOCK PS-23 BOARD CN403
SW 12V
SW 9V
GND
CN3 (WHT)
CN2 (WHT)
CN1 (WHT)
CN7 (WHT)
TO TUNER, AUDIO BLOCK AM-3 BOARD CN501
AUDIO IN (X)
AUDIO SELECT
AUDIO MUTE 4
AUDIO OUT (X)
CAMERA REMOTE
CN9
AUDIO
VIDEO
IN
OUT
DRUM
V. HEAD A(X)
V. HEAD A(Y)
V. HEAD B(X)
V. HEAD B(Y)
1-610-396
13

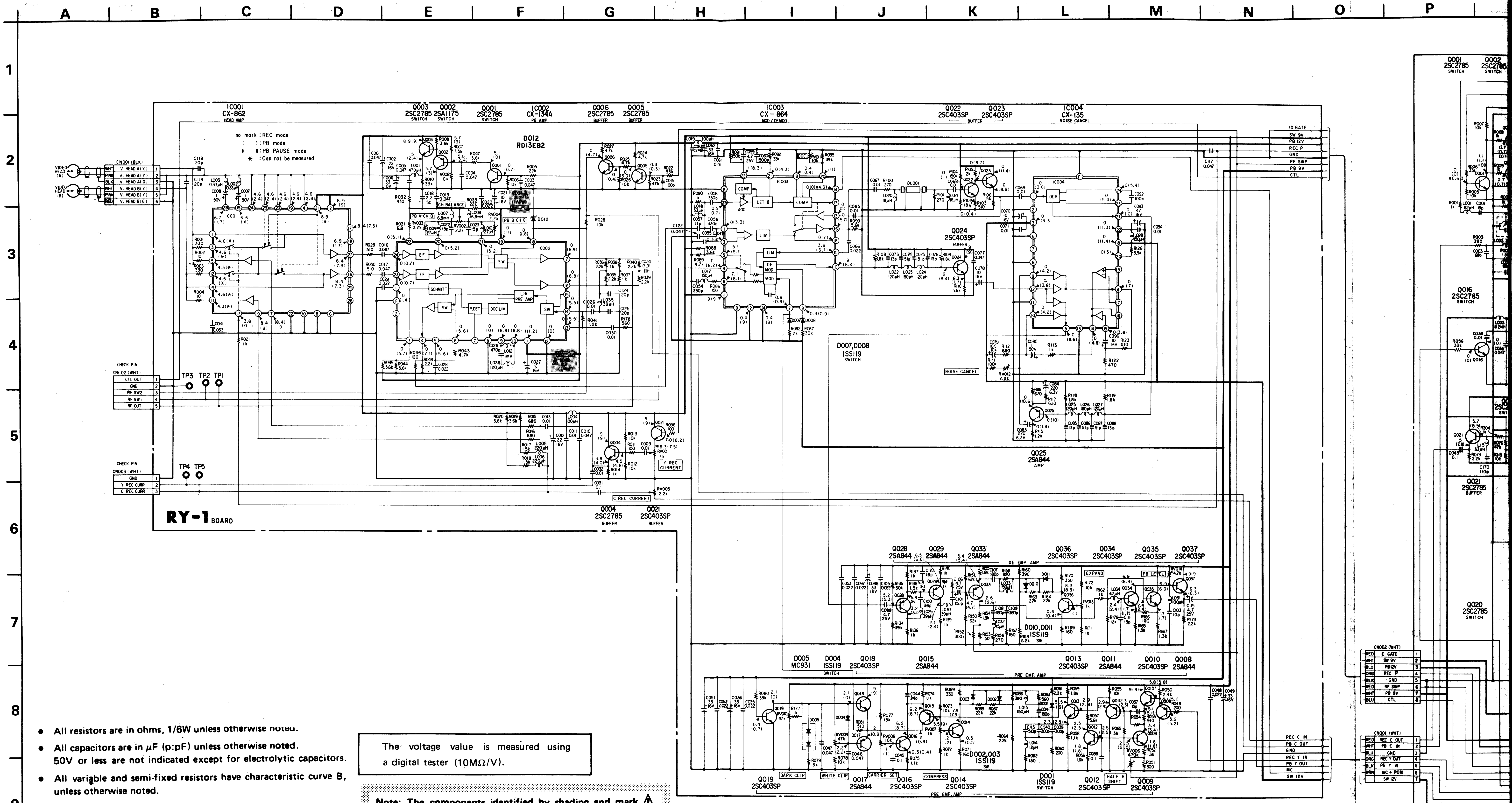
- Color code of sleeving over the end of the jacket.

White
Red
(Red) ((Gray))

- ○— indicates a lead wire mounted on the component side.
- ●— indicates a lead wire mounted on the printed side.
- ▨ Soldering side
- ▨ B + pattern

IC·Q	D	RV
68		
53 56	20	RV12
		RV11
49 IC14		
54 55 51	18	
52 50	28 36	
48 IC13	37	
IC16 IC15	19	
72		
	32 22 31	RV10
47		
69 9	2	
	7	
6 8 7		RV7 RV2
		LV4
		LV3
11		
IC7 10 1		
25 24 26 IC4		
27 IC8,12 IC1		
3,2		LV1
IC9 22 IC2		
23 IC6		CV1
	9	
		RV13 RV1
29 28		
30	1	
17		
18		
	5	
IC11		
73 37 35 34 32		RV6
IC10 4		
38	35	
31 36 33 20	13	
15 14		
46	17	
IC5		RV5
IC3 16 13		RV3
45 42 43 41 40 39		LV2
19		
44 21		RV9
	16	RV8 RV4
IC12		
	4	

YC-25 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS) RY-1 (LOW CONVERTED CHROMA & Y-FM SIGNALS, RECORD/PLAYBACK AMP)

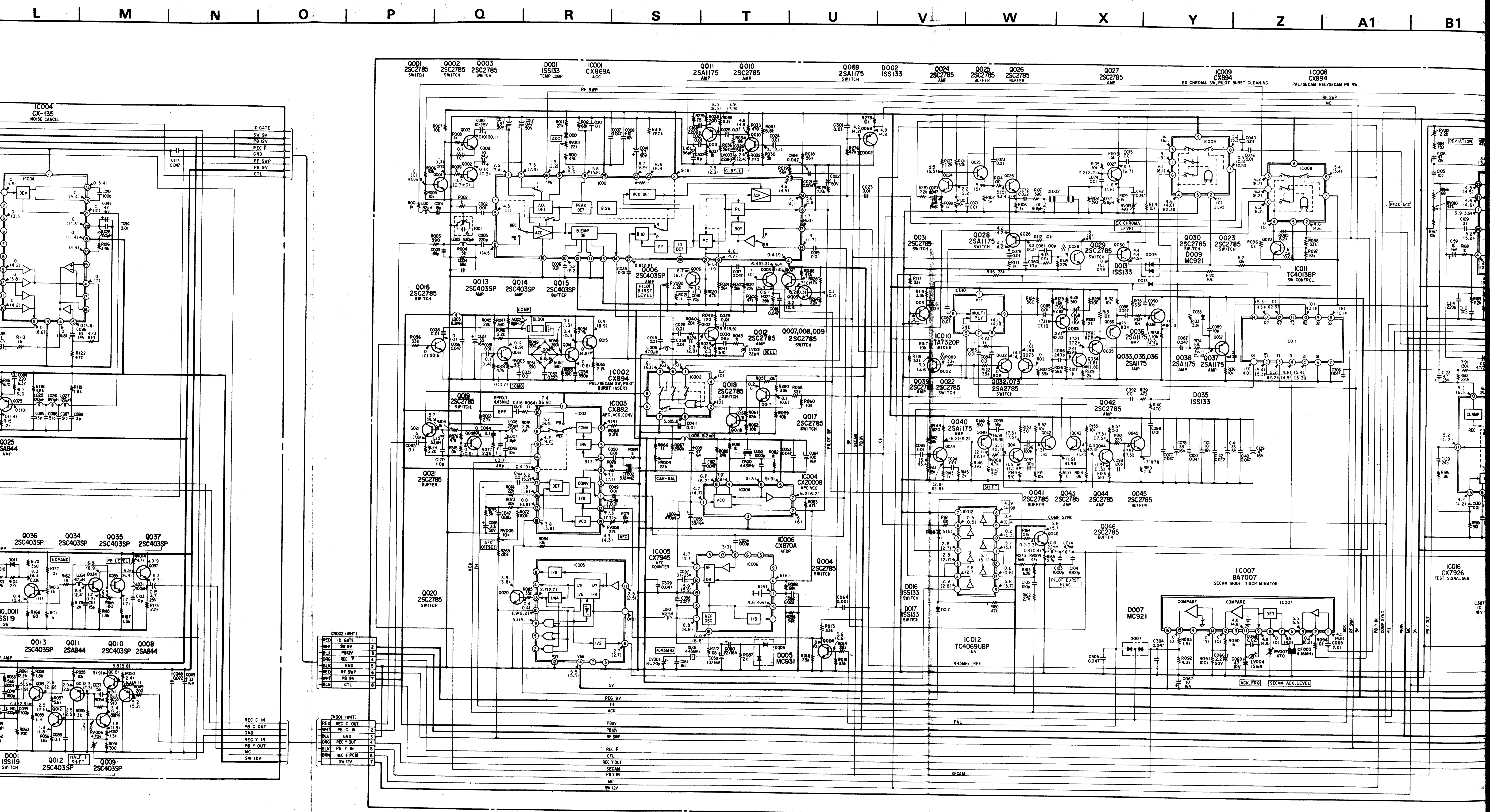

A B C D E F G H I J K L M N O P
1 2 3 4 5 6 7 8 9 10
IC001 CX-862 HEAD AMP
Q003 2SC2785 SWITCH
Q002 2SA1175 SWITCH
Q001 2SC2785 SWITCH
IC002 CX-134A PB AMP
D012 RD13EB2
Q006 2SC2785 BUFFER
Q005 2SC2785 BUFFER
IC003 CX-864 MOD / DEMOD
Q022 2SC403SP
Q023 2SC403SP
BUFFER
IC004 CX-135 NOISE CANCEL
no mark : REC mode
( ) : PB mode
[[ ]] : PB PAUSE mode
* : Can not be measured
CN001 (BLK)
V. HEAD A(X)
V. HEAD A(Y)
V. HEAD A(G)
V. HEAD B(X)
V. HEAD B(Y)
V. HEAD B(G)
VIDEO HEAD (A)
VIDEO HEAD (B)
CHECK PIN
CN002 (WHT)
CTL OUT
GND
RF SW2
RF SW1
RF OUT
TP3 TP2 TP1
CHECK PIN
CN003 (WHT)
GND
Y REC CURR
C REC CURR
TP4 TP5
RY-1 BOARD
PB A-CH Q
CH BALANCE
PB B-CH Q
EF
SW
SCHMITT
P.DET
DOC LIM
LIM PRE AMP
COMP
DET II
AGC
LIM
DE MOD
DL001
Q024 2SC403SP BUFFER
DEM
D007, D008 1SS119 SWITCH
NOISE CANCEL
Q025 2SA844 AMP
Y REC CURRENT
C REC CURRENT
Q004 2SC2785 BUFFER
Q021 2SC403SP BUFFER
Q028 2SA844
Q029 2SA844
Q033 2SA844
DE EMP AMP
Q036 2SC403SP
Q034 2SC403SP
Q035 2SC403SP
Q037 2SC403SP
EXPAND
PB LEVEL
D010, D011 1SS119 SW
D005 MC931
D004 1SS119 SWITCH
Q018 2SC403SP
Q015 2SA844
PRE EMP AMP
Q013 2SC403SP
Q011 2SA844
Q010 2SC403SP
Q008 2SA844
Q019 2SC403SP
DARK CLIP
WHITE CLIP
Q017 2SA844
CARRIER SET
Q016 2SC403SP
COMPRESS
Q014 2SC403SP
D002, 003 1SS119 SW
D001 1SS119 SWITCH
HALF H SHIFT
Q012 2SC403SP
Q009 2SC403SP
PRE EMP AMP
ID GATE
SW 9V
PB 12V
REC P
GND
PF SWP
PB 9V
CTL
REC C IN
PB C OUT
GND
REC Y IN
PB Y OUT
MC
SW 12V
CN002 (WHT)
ID GATE
SW 9V
PB12V
REC P
GND
RF SWP
PB 9V
CTL
CN001 (WHT)
REC C OUT
PB C IN
GND
REC Y OUT
PB Y IN
MC + PCM
SW 12V
Q001 2SC2785 SWITCH
Q002 2SC2785 SWITCH
Q016 2SC2785 SWITCH
Q021 2SC2785 BUFFER
Q020 2SC2785 SWITCH

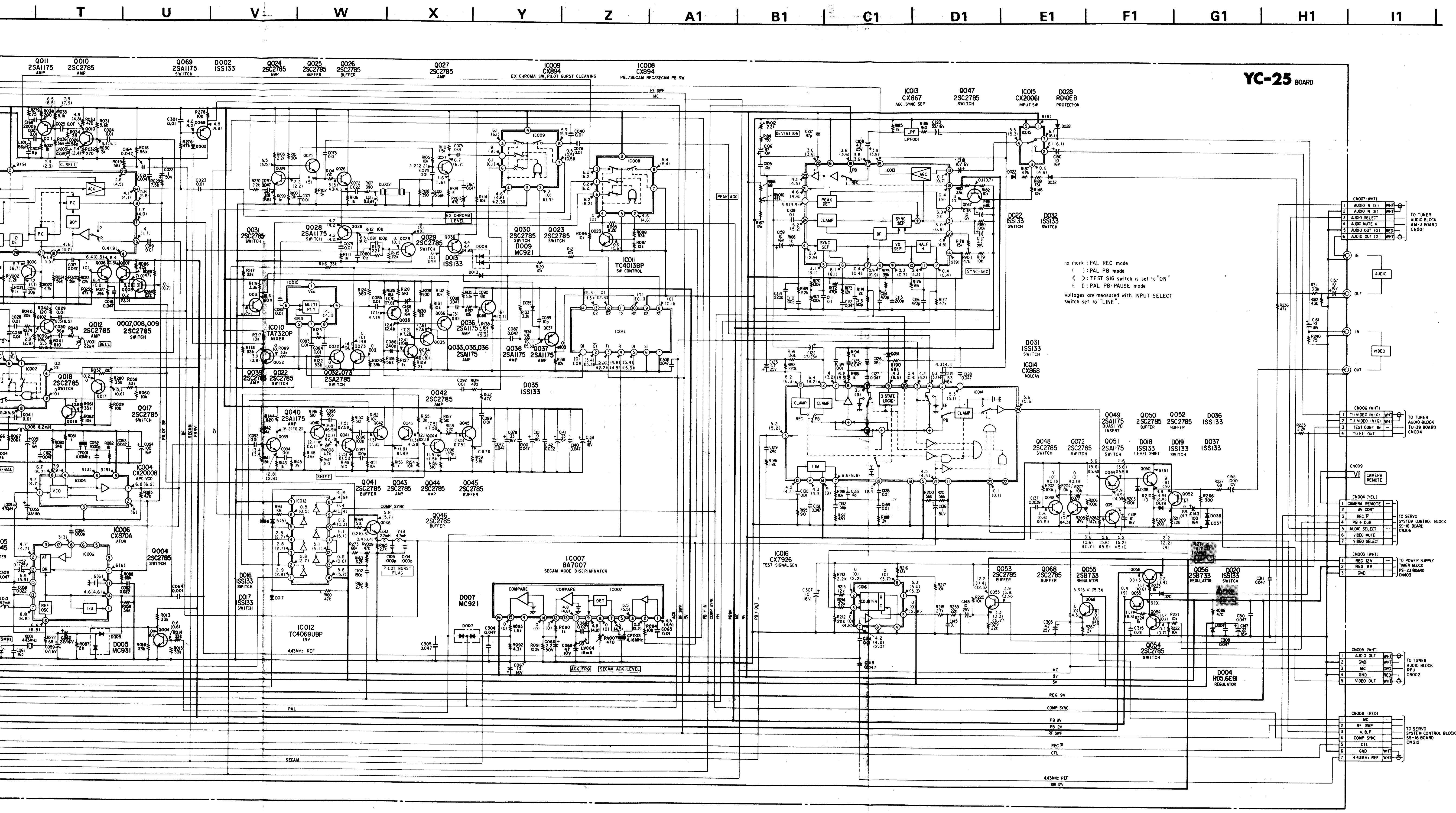
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in µF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- △ : internal component
- ▭ * : Nonflammable resistor
- ▭ : Fusible resistor
- ―― : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.

The voltage value is measured using a digital tester (10MΩ/V).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

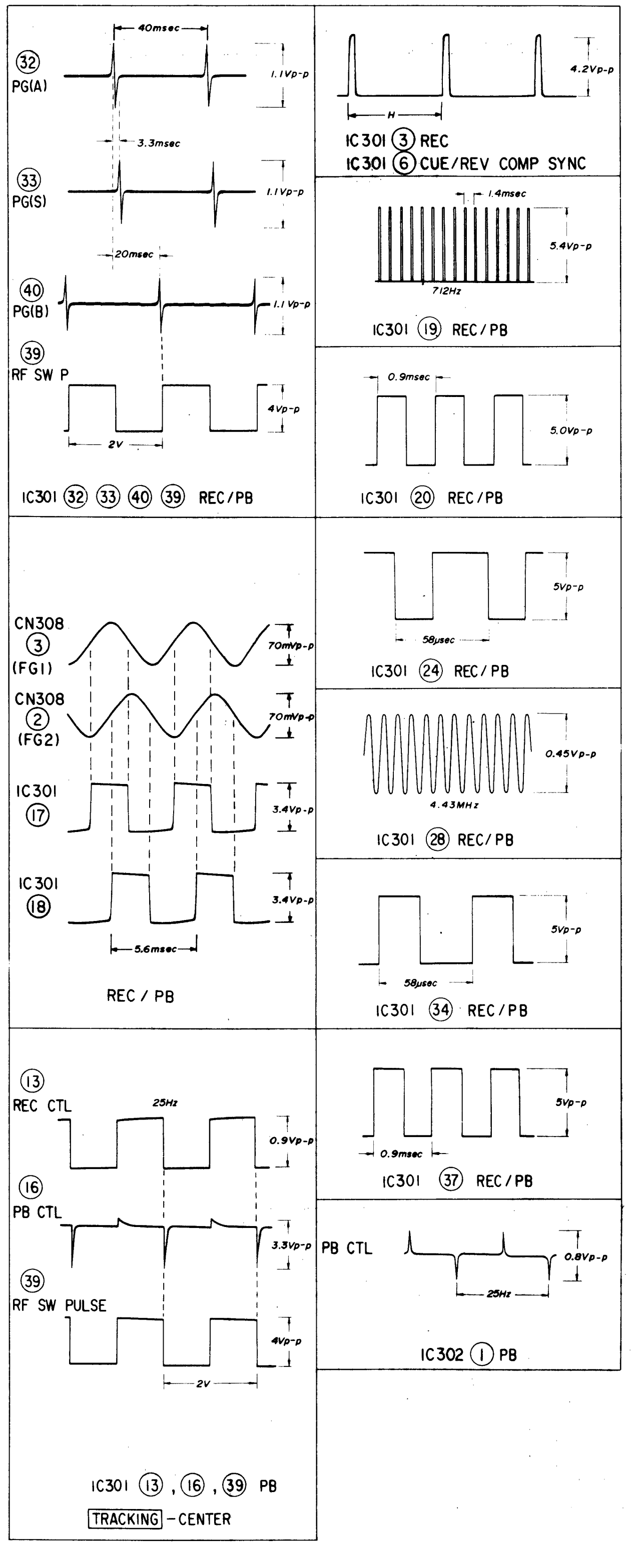

L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
A1
B1
IC004 CX-135 NOISE CANCEL
Q001 2SC2785 SWITCH
Q002 2SC2785 SWITCH
Q003 2SC2785 SWITCH
D001 1SS133 TEMP COMP
IC001 CX869A ACC
Q011 2SA1175 AMP
Q010 2SC2785 AMP
Q069 2SA1175 SWITCH
D002 1SS133
Q024 2SC2785 AMP
Q025 2SC2785 BUFFER
Q026 2SC2785 BUFFER
Q027 2SC2785 AMP
IC009 CX894 EX CHROMA SW, PILOT BURST CLEANING
IC008 CX894 PAL/SECAM REC/SECAM PB SW
RF SWP
MC
ACC DET
PEAK DET
B.SW
ACK DET
B.EMP DE
C.BELL
DEVIATION
PEAK AGC
EX CHROMA LEVEL
Q013 2SC403SP AMP
Q014 2SC403SP AMP
Q015 2SC403SP BUFFER
Q006 2SC403SP AMP
PILOT BURST LEVEL
Q016 2SC2785 SWITCH
Q031 2SC2785 SWITCH
Q028 2SA1175 SWITCH
Q029 2SC2785 SWITCH
D013 1SS133
Q030 2SC2785 SWITCH
D009 MC921
Q023 2SC2785 SWITCH
IC011 TC4013BP SW CONTROL
COMB
Q012 2SC2785 AMP
Q007,008,009 2SC2785 SWITCH
BELL
IC002 CX894 PAL/SECAM SW, PILOT BURST INSERT
IC010 TA7320P MIXER
MULTI PLY
Q039 2SC2785 AMP
Q022 2SC2785 SWITCH
Q032,073 2SA2785 SWITCH
Q033,035,036 2SA1175 AMP
Q036 2SA1175 AMP
Q038 2SA1175 AMP
Q037 2SA1175 AMP
D035 1SS133
Q019 2SC2785 SWITCH
IC003 CX882 AFC,VCO,CONV
BPF
CONV
INV
DET
VCO
Q018 2SC2785 SWITCH
Q017 2SC2785 SWITCH
Q042 2SC2785 AMP
Q040 2SA1175 AMP
CAR•BAL
IC004 CX20008 APC VCO
Q021 2SC2785 BUFFER
SHIFT
Q041 2SC2785 BUFFER
Q043 2SC2785 AMP
Q044 2SC2785 AMP
Q045 2SC2785 BUFFER
AFC OFFSET
AFC
COMP SYNC
Q046 2SC2785 BUFFER
IC005 CX7945 AFC COUNTER
IC006 CX870A AFDR
Q004 2SC2785 SWITCH
Q020 2SC2785 SWITCH
REF OSC
PILOT BURST FLAG
D016 1SS133 SWITCH
D017 1SS133 SWITCH
IC012 TC4069UBP INV
4.43MHz REF
IC007 BA7007 SECAM MODE DISCRIMINATOR
COMPARE
D007 MC921
ACK.FRQ
SECAM ACK.LEVEL
IC016 CX7926 TEST SIGNAL GEN
CLAMP
D005 MC931
4.43MHz
Q036 2SC403SP
Q034 2SC403SP
Q035 2SC403SP
Q037 2SC403SP
EXPAND
PB LEVEL
Q025 2SA844 AMP
D010,D011 1SS119
Q013 2SC403SP
Q011 2SA844
Q010 2SC403SP
Q008 2SA844
D001 1SS119 SWITCH
Q012 2SC403SP
Q009 2SC403SP
HALF H SHIFT
CN002 (WHT)
RED ID GATE 1
WHT SW 9V 2
BLU PB12V 3
ORG REC P 4
BLK GND 5
RED RF SWP 6
WHT PB 9V 7
BLU CTL 8
CN001 (WHT)
RED REC C OUT 1
WHT PB C IN 2
BLU GND 3
ORG REC Y OUT 4
BLK PB Y IN 5
BRN MC+PCM 6
RED SW 12V 7
ID GATE
SW 9V
PB 12V
REC P
GND
PF SWP
PB 9V
CTL
REC C IN
PB C OUT
REC Y IN
PB Y OUT
SW 12V
REG 9V
FH
ACK
PB9V
PB12V
PAL
REC P
CTL
REC Y OUT
SECAM
PBY IN
5V
PILOT BF
SECAM PB
CF
PB Y IN
COMP SYNC
PB Y OUT


T
U
V
W
X
Y
Z
A1
B1
C1
D1
E1
F1
G1
H1
I1
YC-25 BOARD
Q011 2SA1175 AMP
Q010 2SC2785 AMP
Q069 2SA1175 SWITCH
D002 1SS133
Q024 2SC2785 AMP
Q025 2SC2785 BUFFER
Q026 2SC2785 BUFFER
Q027 2SC2785 AMP
IC009 CX894 EX CHROMA SW, PILOT BURST CLEANING
IC008 CX894 PAL/SECAM REC/SECAM PB SW
IC013 CX867 AGC, SYNC SEP
Q047 2SC2785 SWITCH
IC015 CX20061 INPUT SW
D028 RD10EB PROTECTION
C.BELL
ACK
PC
90°
ID DET
EX CHROMA LEVEL
PEAK AGC
DEVIATION
LPF
LPF001
PEAK DET
CLAMP
SYNC SEP
AGC
BF
VD SEP
HALF H
SYNC AGC
Q031 2SC2785 SWITCH
Q028 2SA1175 SWITCH
Q029 2SC2785 SWITCH
D013 1SS133
Q030 2SC2785 SWITCH
D009 MC921
Q023 2SC2785 SWITCH
IC011 TC4013BP SW CONTROL
D022 1SS133 SWITCH
D032 1SS133 SWITCH
Q012 2SC2785 AMP
Q007,008,009 2SC2785 SWITCH
IC010 TA7320P MIXER
MULTI PLY
GND
Vcc
Q039 2SC2785 AMP
Q022 2SC2785 SWITCH
Q032,073 2SA2785 SWITCH
Q033,035,036 2SA1175 AMP
Q038 2SA1175 AMP
Q037 2SA1175 AMP
D035 1SS133
Q018 2SC2785 SWITCH
Q017 2SC2785 SWITCH
IC004 CX20008 APC VCO
VCO
D031 1SS133 SWITCH
IC014 CX868 NOLCAN
3 STATE LOGIC
REC
PB
LIM
Q040 2SA1175 AMP
Q042 2SC2785 AMP
Q041 2SC2785 BUFFER
Q043 2SC2785 AMP
Q044 2SC2785 AMP
Q045 2SC2785 BUFFER
SHIFT
PILOT BF
BF SECAM
CF
Q046 2SC2785 BUFFER
COMP SYNC
PILOT BURST FLAG
IC006 CX870A AFDR
AF
DR
REF OSC
1/3
Q004 2SC2785 SWITCH
D016 1SS133 SWITCH
D017 1SS133 SWITCH
IC012 TC4069UBP INV
4.43MHz REF
D005 MC931
IC007 BA7007 SECAM MODE DISCRIMINATOR
COMPARE
DET
D007 MC921
ACK.FRQ
SECAM ACK.LEVEL
CF003 4.16MHz
IC016 CX7926 TEST SIGNAL GEN
COUNTER
Q053 2SC2785 BUFFER
Q068 2SC2785 BUFFER
Q055 2SB733 REGULATOR
Q056 2SB733 REGULATOR
D020 1SS133 SWITCH
Q054 2SC2785 SWITCH
D004 RD5.6EB1 REGULATOR
Q048 2SC2785 SWITCH
Q072 2SC2785 SWITCH
Q049 2SA1175 QUASI VD INSERT
Q051 2SA1175 SWITCH
Q050 2SC2785 BUFFER
Q052 2SC2785 BUFFER
D018 1SS133 LEVEL SHIFT
D019 1SS133 SWITCH
D036 1SS133
D037 1SS133
CN007 (WHT)
AUDIO IN (X)
AUDIO IN (G)
AUDIO SELECT
AUDIO MUTE 4
AUDIO OUT (G)
AUDIO OUT (X)
TO TUNER AUDIO BLOCK AM-3 BOARD CN501
AUDIO
IN
OUT
VIDEO
CN006 (WHT)
TU VIDEO IN (X)
TU VIDEO IN (G)
TEST CONT IN
TU.EE OUT
TO TUNER AUDIO BLOCK TU-39 BOARD CN004
CN009
CAMERA REMOTE
CN004 (YEL)
CAMERA REMOTE
AV CONT
REC P
PB + DUB
AUDIO SELECT
VIDEO MUTE
VIDEO SELECT
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN306
CN003 (WHT)
REG 12V
REG 9V
GND
TO POWER SUPPLY TIMER BLOCK PS-23 BOARD CN403
CN005 (WHT)
AUDIO OUT
GND
MC
GND
VIDEO OUT
TO TUNER AUDIO BLOCK RFU CN002
CN008 (RED)
MC
RF SWP
V.B.P.
COMP SYNC
CTL
GND
4.43MHz REF
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN312
RF SWP
MC
PAL
SECAM
9V
5V
REG 9V
COMP SYNC
PB 9V
PB 12V
REC P
CTL
4.43MHz REF
SW 12V

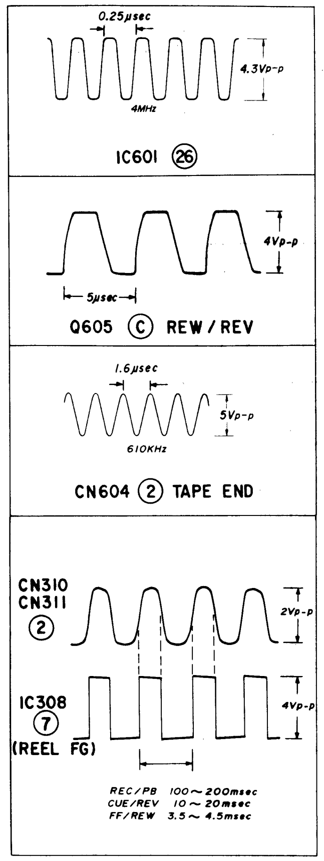
no mark : PAL REC mode
( ) : PAL PB mode
< > : TEST SIG switch is set to "ON"
(( )) : PAL PB·PAUSE mode

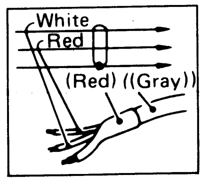
Voltages are measured with INPUT SELECT switch set to "LINE".

SS-16 (SERVO) BOARD



SS-16 (SYSTEM CONTROL) BOARD

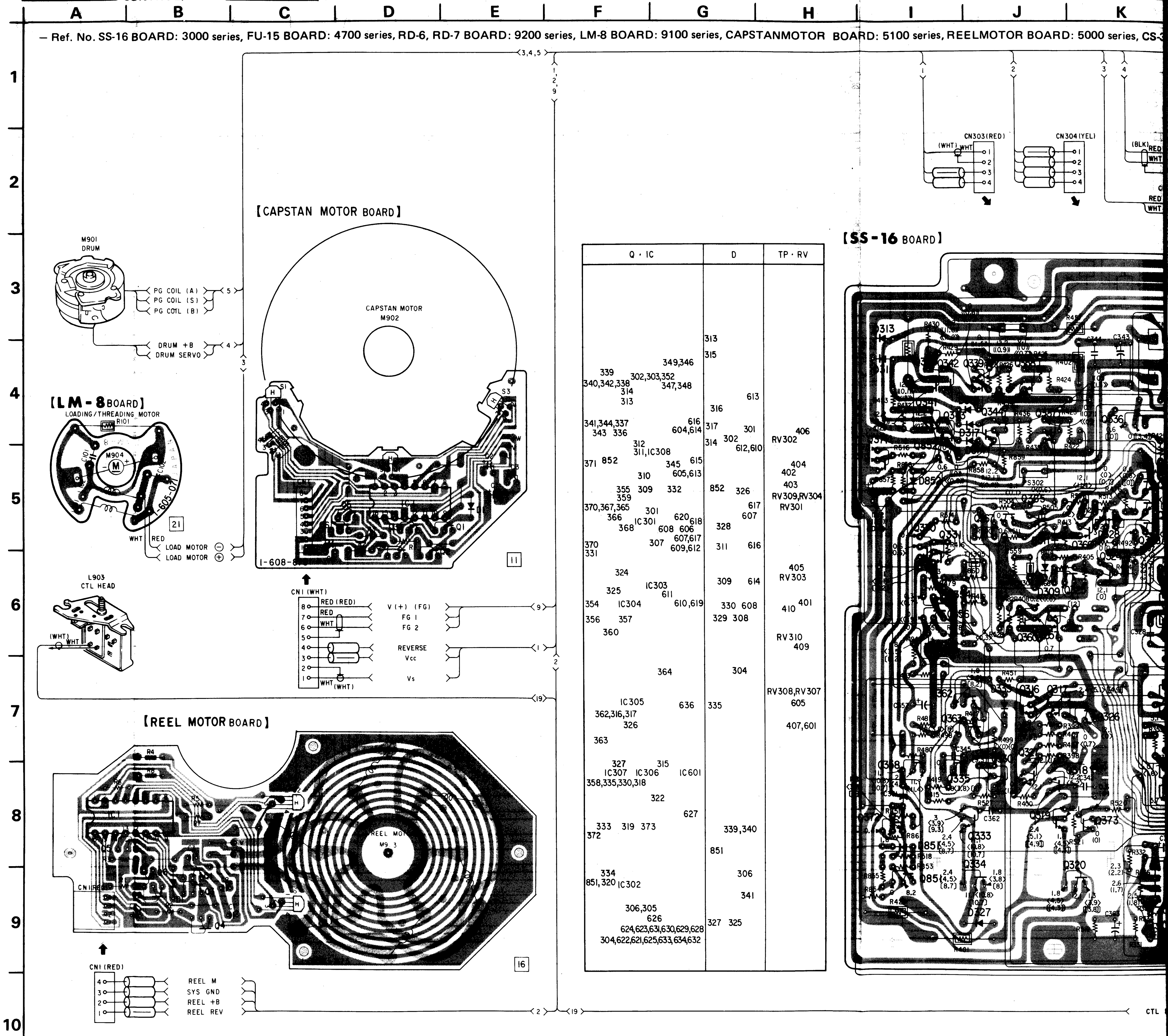



White
Red
(Red) ((Gray))

- ○— indicates a lead wire mounted on the component side.
- ●— indicates a lead wire mounted on the printed side.
- ▨ Soldering side
- ■ B + pattern
- ░ Component side

SS-16 (SERVO/SYSTEM CONTROL) **FU-15** (FUNCTION SWITCH) **RD-6** (ROTATION DETECTOR) **RD-7** (ROTATION DETECTOR) **LM-8** (NOISE FILTER) **CAP**

– Ref. No. SS-16 BOARD: 3000 series, FU-15 BOARD: 4700 series, RD-6, RD-7 BOARD: 9200 series, LM-8 BOARD: 9100 series, CAPSTANMOTOR BOARD: 5100 series, REELMOTOR BOARD: 5000 series, CS-3


A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
9
10
M901
DRUM
PG COIL (A)
PG COIL (S)
PG COIL (B)
DRUM +B
DRUM SERVO
【CAPSTAN MOTOR BOARD】
CAPSTAN MOTOR
M902
S1
S3
H
Q1
1-608-
11
【LM-8 BOARD】
LOADING/THREADING MOTOR
R101
M904
M
605-07
21
WHT
RED
LOAD MOTOR ⊖
LOAD MOTOR ⊕
L903
CTL HEAD
(WHT)
WHT
CN1 (WHT)
RED (RED)
RED
WHT
WHT (WHT)
V (+) (FG)
FG 1
FG 2
REVERSE
Vcc
Vs
【REEL MOTOR BOARD】
R4
REEL MO
M9 3
CN1
16
CN1 (RED)
REEL M
SYS GND
REEL +B
REEL REV
CN303 (RED)
CN304 (YEL)
(WHT)
WHT
(BLK)
RED
【SS-16 BOARD】
CTL

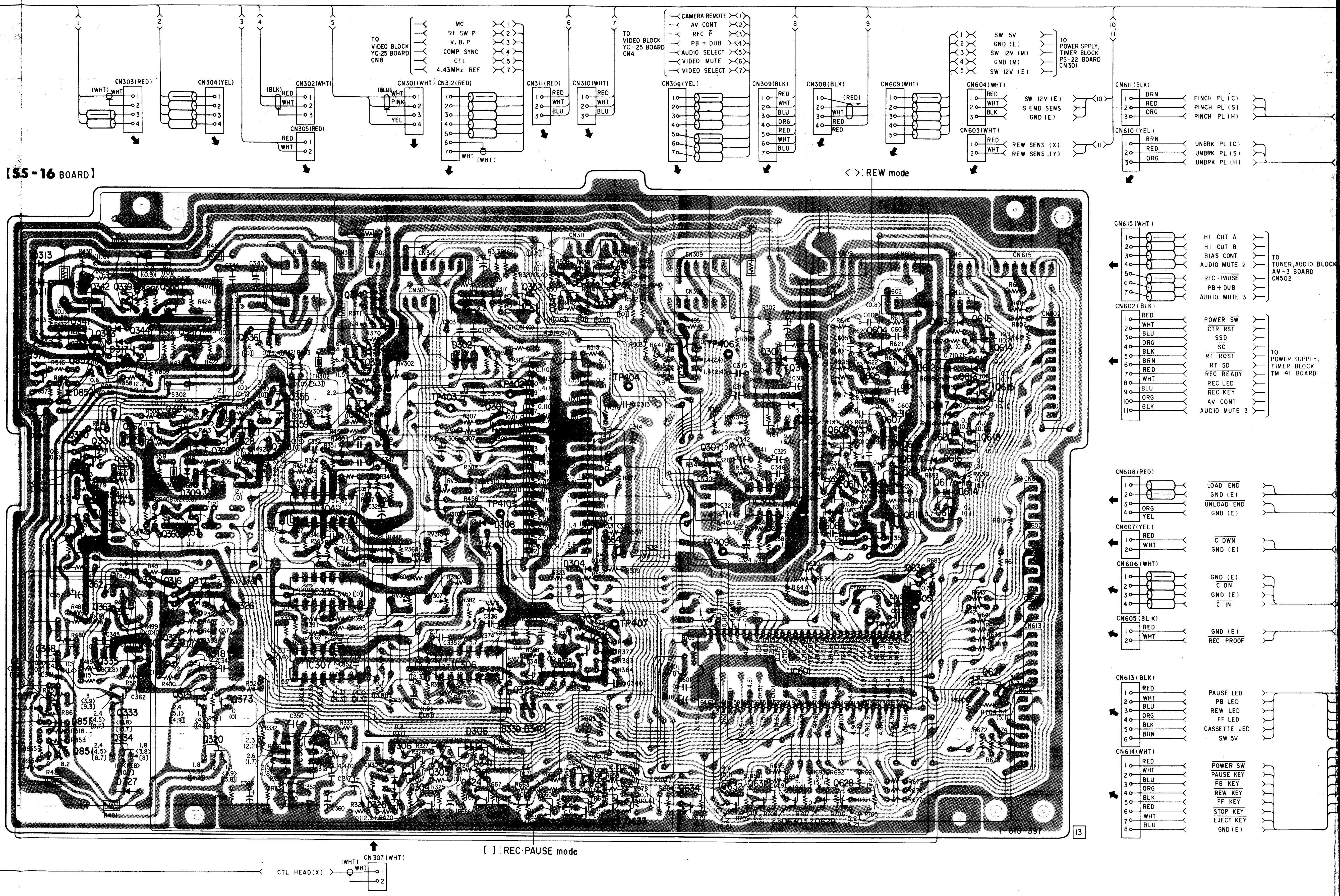
Q · IC	D	TP · RV
	313	
	315	
349,346		
339		
340,342,338 302,303,352 347,348		
314	613	
313	316	
341,344,337 616	317 301	406
343 336 604,614		RV302
312	314 302	
311,IC308	612,610	
371 852 345 615		404
310 605,613		402
355 309 332	852 326	403
359		RV309,RV304
370,367,365	617	RV301
301		
366 IC301 620 618	607	
368 608 606	328	
607,617		
370 307 609,612	311 616	
331		
324		405
	309 614	RV303
325 IC303		
611		
354 IC304 610,619	330 608	410 401
356 357	329 308	
360		RV310
		409
364	304	
		RV308,RV307
IC305 636	335	605
362,316,317		
326		407,601
363		
327 315		
IC307 IC306 IC601		
358,335,330,318		
322		
627		
333 319 373	339,340	
372		
	851	
334	306	
851,320 IC302		
	341	
306,305		
626	327 325	
624,623,631,630,629,628		
304,622,621,625,633,634,632		

TATION DETECTOR) **RD-7** (ROTATION DETECTOR) **LM-8** (NOISE FILTER) **CAPSTAN MOTOR** (CAPSTAN MOTOR) **REEL MOTOR** (CAPSTAN MOTOR) **REEL MOTOR** (REEL MOTOR) **CS-3** (CASSETTE ON SWITCH) **CS-**

F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V

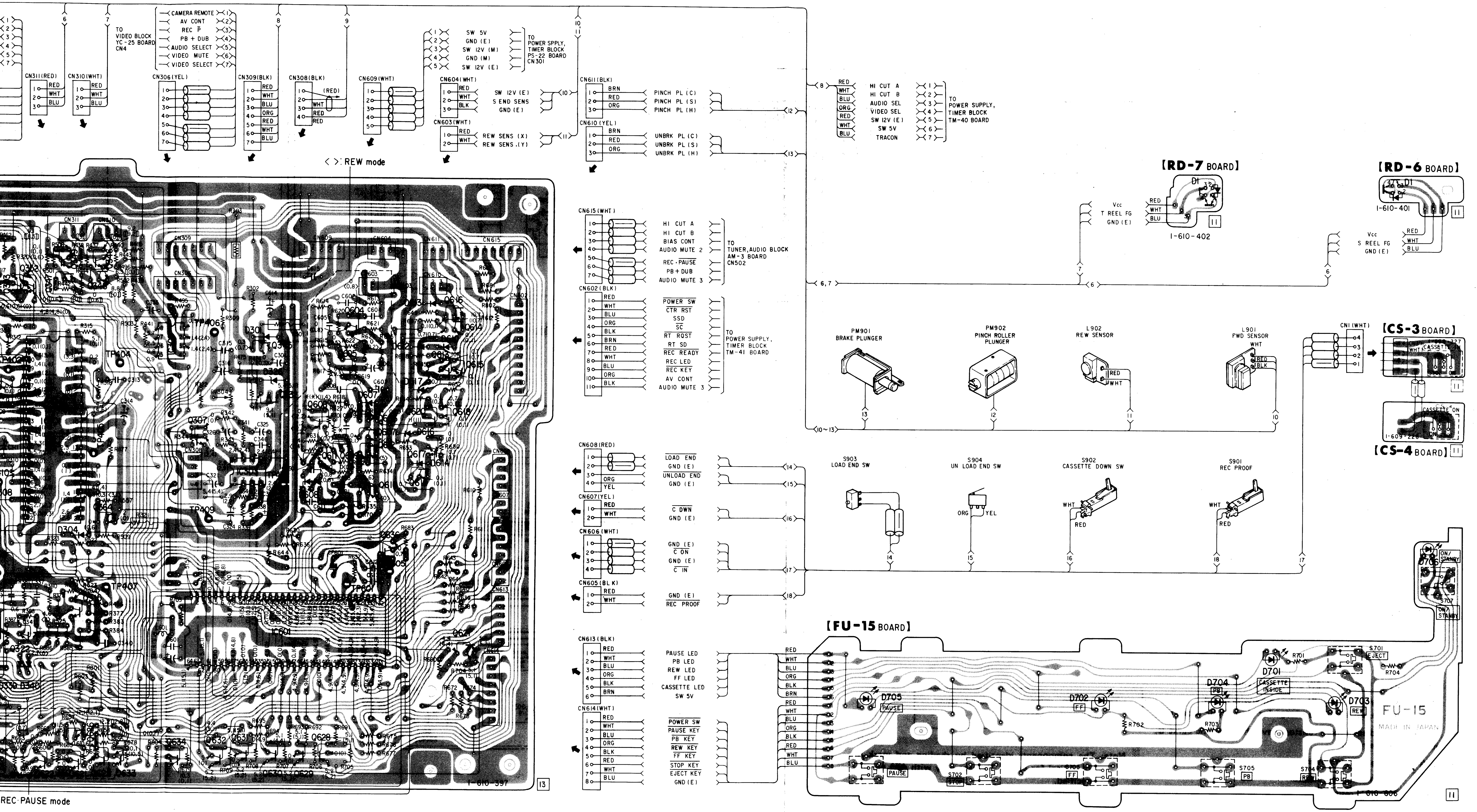
ries, LM-8 BOARD: 9100 series, CAPSTANMOTOR BOARD: 5100 series, REELMOTOR BOARD: 5000 series, CS-3, CS-4 BOARD: 9300 series —

Q · IC	D	TP · RV
	313	
	315	
349,346		
339 302,303,352		
340,342,338 347,348		
314		
313	613	
	316	
341,344,337 616	317 301	
343 336 604,614		406
	314 302	RV302
312		
311,IC308	612,610	
371 852 345 615		404
310 605,613		402
355 309 332	852 326	403
359		RV309,RV304
370,367,365	617	RV301
366 301 620 618	607	
368 IC301 608 606	328	
607,617		
370 307 609,612	311 616	
331		
		405
324		
	309 614	RV303
IC303		
325 611		
354 IC304 610,619	330 608	410 401
356 357	329 308	
360		
		RV310
		409
364	304	
		RV308,RV307
IC305 636	335	605
362,316,317		
326		407,601
363		
327 315		
IC307 IC306 IC601		
358,335,330,318		
322		
627		
333 319 373	339,340	
372		
	851	
334	306	
851,320 IC302		
	341	
306,305		
626		
624,623,631,630,629,628	327 325	
304,622,621,625,633,634,632		


[SS-16 BOARD]
< >: REW mode
[ ]: REC·PAUSE mode
CN303(RED)
CN304(YEL)
CN302(WHT)
CN305(RED)
TO VIDEO BLOCK YC-25 BOARD CN8
MC
RF SW P
V.B.P
COMP SYNC
CTL
4.43MHz REF
CN301(WHT)
CN312(RED)
CN311(RED)
CN310(WHT)
TO VIDEO BLOCK YC-25 BOARD CN4
CAMERA REMOTE
AV CONT
REC P̄
PB + DUB
AUDIO SELECT
VIDEO MUTE
VIDEO SELECT
CN306(YEL)
CN309(BLK)
CN308(BLK)
CN609(WHT)
SW 5V
GND (E)
SW 12V (M)
GND (M)
SW 12V (E)
TO POWER SPPLY, TIMER BLOCK PS-22 BOARD CN301
CN604(WHT)
SW 12V (E)
S END SENS
GND (E)
CN603(WHT)
REW SENS (X)
REW SENS (Y)
CN611(BLK)
PINCH PL (C)
PINCH PL (S)
PINCH PL (H)
CN610(YEL)
UNBRK PL (C)
UNBRK PL (S)
UNBRK PL (H)
CN615(WHT)
HI CUT A
HI CUT B
BIAS CONT
AUDIO MUTE 2
REC·PAUSE
PB + DUB
AUDIO MUTE 3
TO TUNER, AUDIO BLOCK AM-3 BOARD CN502
CN602(BLK)
POWER SW
CTR RST
SSD
SC
RT RQST
RT SD
REC READY
REC LED
REC KEY
AV CONT
AUDIO MUTE 3
TO POWER SUPPLY, TIMER BLOCK TM-41 BOARD
CN608(RED)
LOAD END
GND (E)
UNLOAD END
GND (E)
CN607(YEL)
C DWN
GND (E)
CN606(WHT)
GND (E)
C ON
GND (E)
C IN
CN605(BLK)
GND (E)
REC PROOF
CN613(BLK)
PAUSE LED
PB LED
REW LED
FF LED
CASSETTE LED
SW 5V
CN614(WHT)
POWER SW
PAUSE KEY
PB KEY
REW KEY
FF KEY
STOP KEY
EJECT KEY
GND (E)
CTL HEAD (X)
CN307(WHT)
1-610-397
13

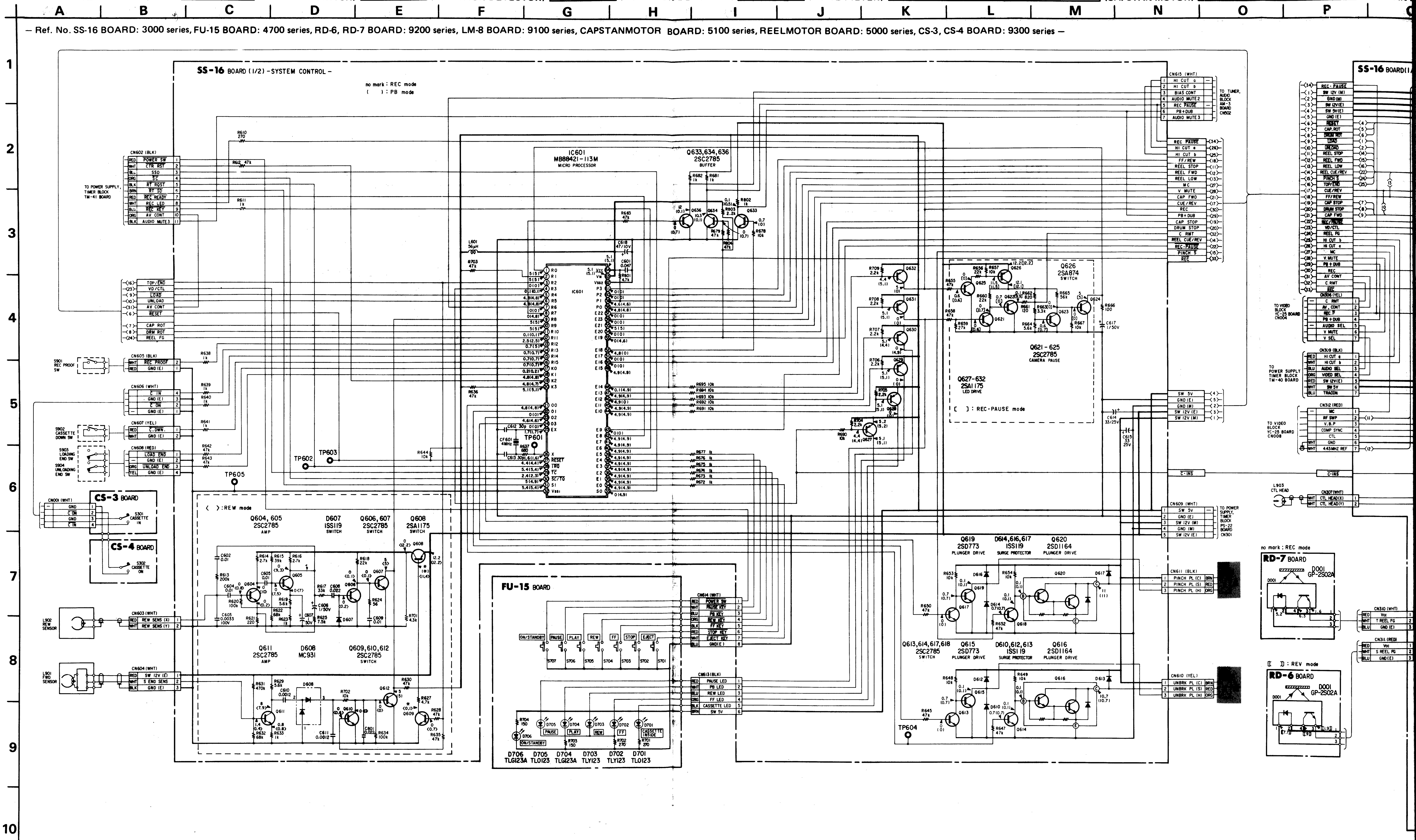
STAN MOTOR) **REEL MOTOR** (CAPSTAN MOTOR) **REEL MOTOR** (REEL MOTOR) **CS-3** (CASSETTE ON SWITCH) **CS-4** (CASSETTE IN SWITCH)

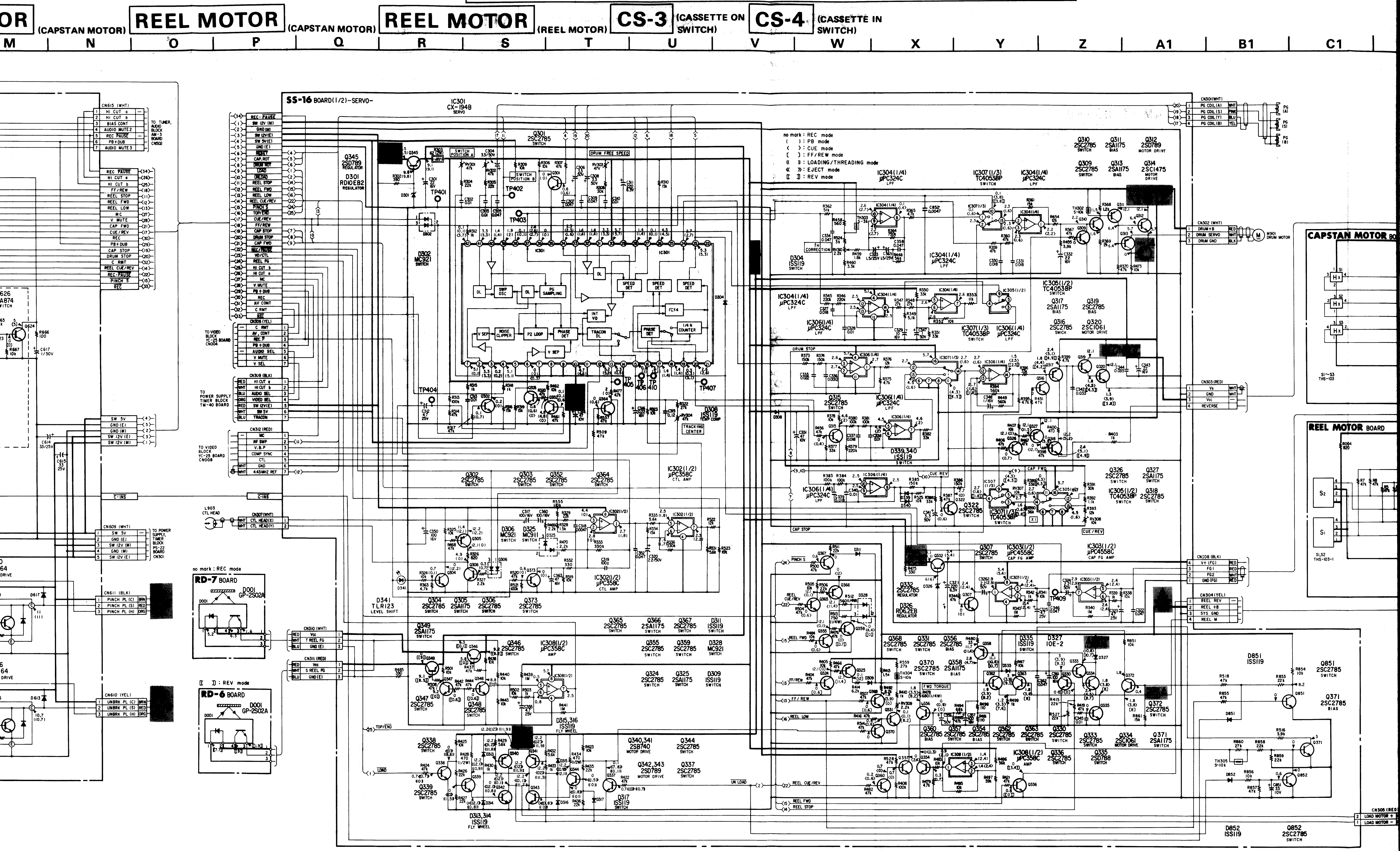
N | O | P | Q | R | S | T | U | V | W | X | Y | Z | A1 | B1 | C1 | D1

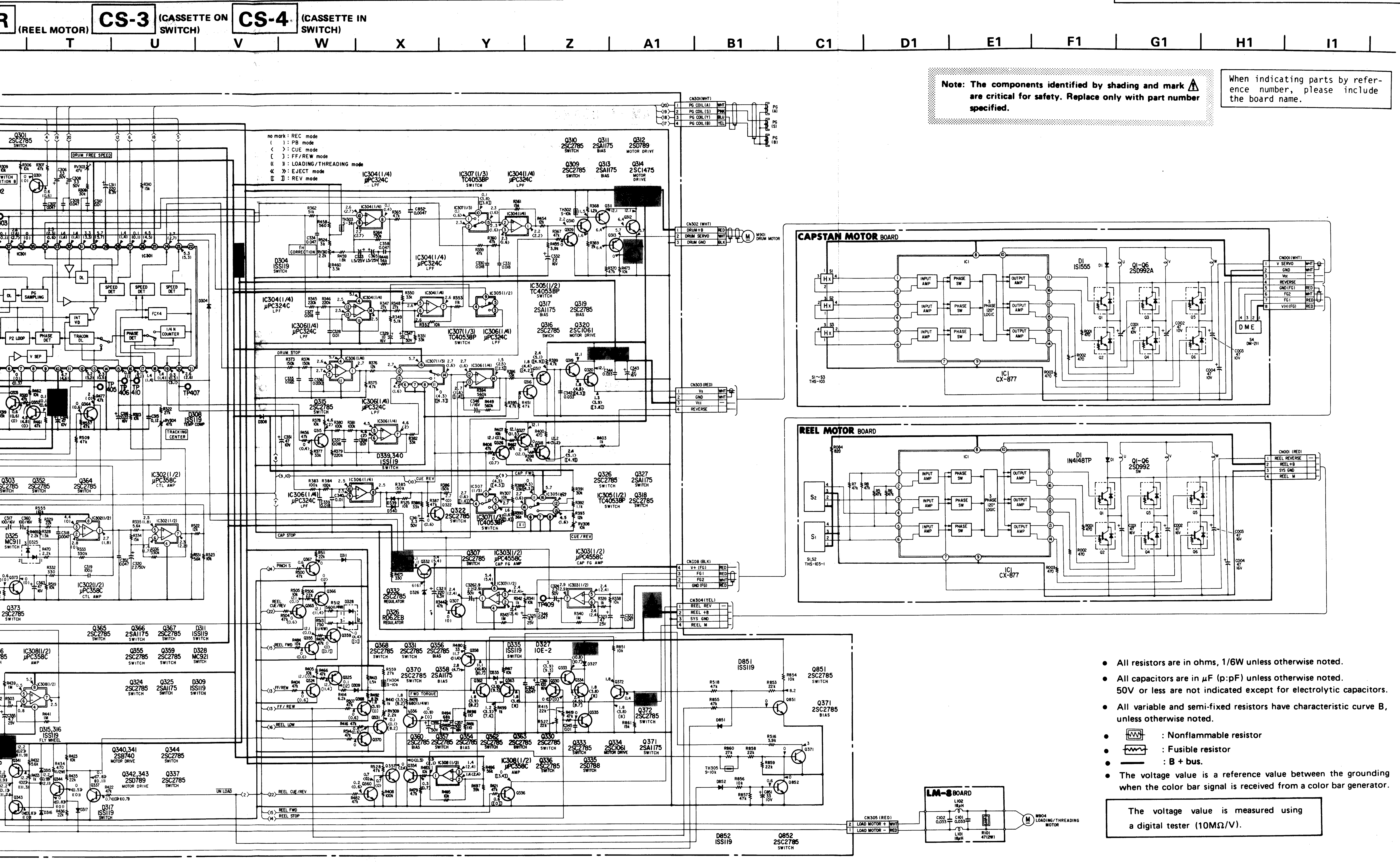

CN311 (RED)
CN310 (WHT)
TO VIDEO BLOCK YC-25 BOARD CN4
CAMERA REMOTE
AV CONT
REC P
PB + DUB
AUDIO SELECT
VIDEO MUTE
VIDEO SELECT
CN306 (YEL)
CN309 (BLK)
CN308 (BLK)
CN609 (WHT)
SW 5V
GND (E)
SW 12V (M)
GND (M)
SW 12V (E)
TO POWER SPPLY, TIMER BLOCK PS-22 BOARD CN301
CN604 (WHT)
SW 12V (E)
S END SENS
GND (E)
CN603 (WHT)
REW SENS (X)
REW SENS (Y)
< >: REW mode
CN611 (BLK)
PINCH PL (C)
PINCH PL (S)
PINCH PL (H)
CN610 (YEL)
UNBRK PL (C)
UNBRK PL (S)
UNBRK PL (H)
HI CUT A
HI CUT B
AUDIO SEL
VIDEO SEL
SW 12V (E)
SW 5V
TRACON
TO POWER SUPPLY, TIMER BLOCK TM-40 BOARD
CN615 (WHT)
HI CUT A
HI CUT B
BIAS CONT
AUDIO MUTE 2
REC · PAUSE
PB + DUB
AUDIO MUTE 3
TO TUNER, AUDIO BLOCK AM-3 BOARD CN502
CN602 (BLK)
POWER SW
CTR RST
SSD
SC
RT RQST
RT SD
REC READY
REC LED
REC KEY
AV CONT
AUDIO MUTE 3
TO POWER SUPPLY, TIMER BLOCK TM-41 BOARD
【RD-7 BOARD】
Vcc
T REEL FG
GND (E)
1-610-402
【RD-6 BOARD】
1-610-401
Vcc
S REEL FG
GND (E)
PM901 BRAKE PLUNGER
PM902 PINCH ROLLER PLUNGER
L902 REW SENSOR
L901 FWD SENSOR
CN1 (WHT)
【CS-3 BOARD】
【CS-4 BOARD】
CASSETTE ON
CN608 (RED)
LOAD END
GND (E)
UNLOAD END
GND (E)
CN607 (YEL)
C DWN
GND (E)
CN606 (WHT)
GND (E)
C ON
GND (E)
C IN
CN605 (BLK)
GND (E)
REC PROOF
S903 LOAD END SW
S904 UN LOAD END SW
S902 CASSETTE DOWN SW
S901 REC PROOF
CN613 (BLK)
PAUSE LED
PB LED
REW LED
FF LED
CASSETTE LED
SW 5V
CN614 (WHT)
POWER SW
PAUSE KEY
PB KEY
REW KEY
FF KEY
STOP KEY
EJECT KEY
GND (E)
【FU-15 BOARD】
D705 PAUSE
D702 FF
D704 PB
D701 CASSETTE INSIDE
D703 REW
D706 ON/STANBY
S701 EJECT
S702 STOP
S703 FF
S704 REW
S705 PB
S707 ON/STANBY
PAUSE
FU-15 MADE IN JAPAN
1-610-397
REC·PAUSE mode

SS-16 (SERVO/SYSTEM CONTROL) **FU-15** (FUNCTION SWITCH) **RD-6** (ROTATION DETECTOR) **RD-7** (ROTATION DETECTOR) **LM-8** (NOISE FILTER) **CAPSTAN MOTOR** (CAPSTAN MOTOR) **REEL MOTOR** (CAPSTAN

– Ref. No. SS-16 BOARD: 3000 series, FU-15 BOARD: 4700 series, RD-6, RD-7 BOARD: 9200 series, LM-8 BOARD: 9100 series, CAPSTANMOTOR BOARD: 5100 series, REELMOTOR BOARD: 5000 series, CS-3, CS-4 BOARD: 9300 series –


A B C D E F G H I J K L M N O P
1 2 3 4 5 6 7 8 9 10
SS-16 BOARD (1/2) -SYSTEM CONTROL-
no mark : REC mode
( ) : PB mode
IC601
MB88421-113M
MICRO PROCESSOR
Q633,634,636
2SC2785
BUFFER
CN602 (BLK)
TO POWER SUPPLY, TIMER BLOCK TM-41 BOARD
POWER SW
CTR RST
SSO
SC
RT RGST
RT SO
REC READY
REC LED
REC KEY
AV CONT
AUDIO MUTE 3
TOP/END
VD/CTL
LOAD
UNLOAD
AV CONT
RESET
CAP ROT
DRM ROT
REEL FG
S901 REC PROOF SW
CN605 (BLK)
REC PROOF
CN606 (WHT)
C IN
C ON
CN607 (YEL)
S902 CASSETTE DOWN SW
C.DOWN
CN608 (RED)
S903 LOADING END SW
S904 UNLOADING END SW
LOAD END
UNLOAD END
TP601
TP602
TP603
TP605
CN001 (WHT)
CS-3 BOARD
S301 CASSETTE IN
CS-4 BOARD
S302 CASSETTE ON
( ) : REW mode
Q604, 605 2SC2785 AMP
D607 1SS119 SWITCH
Q606, 607 2SC2785 SWITCH
Q608 2SA1175 SWITCH
L902 REW SENSOR
CN603 (WHT)
REW SENS (X)
REW SENS (Y)
Q611 2SC2785 AMP
D608 MC931
Q609, 610, 612 2SC2785 SWITCH
L901 FWD SENSOR
CN604 (WHT)
SW 12V (E)
S END SENS
FU-15 BOARD
CN614 (WHT)
POWER SW
PAUSE KEY
PB KEY
REW KEY
FF KEY
STOP KEY
EJECT KEY
ON/STANDBY
PAUSE
PLAY
REW
FF
STOP
EJECT
S707 S706 S705 S704 S703 S702 S701
CN613 (BLK)
PAUSE LED
PB LED
REW LED
FF LED
CASSETTE LED
SW 5V
CASSETTE INSIDE
D706 D705 D704 D703 D702 D701
TLG123A TLO123 TLG123A TLY123 TLY123 TLO123
Q626 2SA874 SWITCH
Q621 - 625 2SC2785 CAMERA PAUSE
Q627-632 2SA1175 LED DRIVE
[ ] : REC·PAUSE mode
Q619 2SD773 PLUNGER DRIVE
D614,616,617 1SS119 SURGE PROTECTOR
Q620 2SD1164 PLUNGER DRIVE
Q613,614,617,618 2SC2785 SWITCH
Q615 2SD773 PLUNGER DRIVE
D610,612,613 1SS119 SURGE PROTECTOR
Q616 2SD1164 PLUNGER DRIVE
TP604
CN615 (WHT)
HI CUT a
HI CUT b
BIAS CONT
AUDIO MUTE 2
REC PAUSE
PB+DUB
AUDIO MUTE 3
TO TUNER, AUDIO BLOCK AM-3 BOARD CN502
CN609 (WHT)
TO POWER SUPPLY, TIMER BLOCK PS-22 BOARD CN301
CN611 (BLK)
PINCH PL (C)
PINCH PL (S)
PINCH PL (H)
CN610 (YEL)
UNBRK PL (C)
UNBRK PL (S)
UNBRK PL (H)
C-INS
SS-16 BOARD
TO VIDEO BLOCK YC-25 BOARD CN004
TO POWER SUPPLY TIMER BLOCK TM-40 BOARD
TO VIDEO BLOCK YC-25 BOARD CN008
L903 CTL HEAD
CN307 (WHT)
CTL HEAD(X)
CTL HEAD(Y)
no mark : REC mode
RD-7 BOARD
D001 GP-2S02A
CN310 (WHT)
Vcc
T REEL FG
GND (E)
CN311 (RED)
S REEL FG
[ ] : REV mode
RD-6 BOARD
D001 GP-2S02A


OR
(CAPSTAN MOTOR)
REEL MOTOR
(CAPSTAN MOTOR)
REEL MOTOR
(REEL MOTOR)
CS-3 (CASSETTE ON SWITCH)
CS-4 (CASSETTE IN SWITCH)
M N O P Q R S T U V W X Y Z A1 B1 C1
SS-16 BOARD(1/2)-SERVO-
IC301 CX-194B SERVO
Q301 2SC2785 SWITCH
Q345 2SD789 REGULATOR
D301 RD10EB2 REGULATOR
D302 MC921 SWITCH
TP401
TP402
TP403
TP404
TP406
TP410
TP407
DRUM FREE SPEED
SWITCH POSITION A
SWITCH POSITION B
SWP OSC
PG SAMPLING
SPEED DET
PHASE DET
TRACON DL
NOISE CLIPPER
P2 LOOP
V SEP
INT VD
1/4 N COUNTER
FCX4
TRACKING CENTER
D308 ISS119 TEMP COMP
no mark : REC mode
( ) : PB mode
< > : CUE mode
[ ] : FF/REW mode
(( )) : LOADING/THREADING mode
« » : EJECT mode
[[ ]] : REV mode
IC304(1/4) μPC324C LPF
IC307(1/3) TC4053BP SWITCH
IC305(1/2) TC4053BP SWITCH
IC306(1/4) μPC324C LPF
IC303(1/2) μPC4558C CAP FG AMP
IC302(1/2) μPC358C CTL AMP
IC308(1/2) μPC358C AMP
Q310 2SC2785 SWITCH
Q311 2SA1175 BIAS
Q312 2SD789 MOTOR DRIVE
Q309 2SC2785 SWITCH
Q313 2SA1175 BIAS
Q314 2SC1475 MOTOR DRIVE
Q317 2SA1175 BIAS
Q319 2SC2785 BIAS
Q316 2SC2785 SWICH
Q320 2SC1061 MOTOR DRIVE
Q315 2SC2785 SWITCH
D339,340 ISS119 SWITCH
Q326 2SC2785 SWITCH
Q327 2SA1175 BIAS
Q318 2SC2785 SWITCH
Q322 2SC2785 SWITCH
D304 ISS119 SWITCH
FH CORRECTION
DRUM STOP
CAP FWD
CUE REV
CUE/REV
CAP STOP
Q307 2SC2785 SWITCH
Q332 2SC2785 REGULATOR
D326 RD6.2EB REGULATOR
TP409
M901 DRUM MOTOR
CN302 (WHT) DRUM +B DRUM SERVO DRUM GND
CN301 (WHT) PG COIL(A) PG COIL(S) PG COIL(Y) PG COIL(B)
CN303 (RED) Vs GND Vcc REVERSE
CN308 (BLK) V+ (FG) FG1 FG2 GND (FG)
CN304 (YEL) REEL REV REEL +B SYS GND REEL M
CN305 (RED) LOAD MOTOR + LOAD MOTOR -
CAPSTAN MOTOR BOARD
S1~S3 THS-103
REEL MOTOR BOARD
S1,S2 THS-103-1
Q302 2SC2785 SWITCH
Q303 2SC2785 SWITCH
Q352 2SC2785 SWITCH
Q364 2SC2785 SWITCH
D306 MC921 SWITCH
D325 MC911 SWITCH
Q304 2SC2785 SWITCH
Q305 2SA1175 SWITCH
Q306 2SC2785 SWITCH
Q373 2SC2785 SWITCH
D341 TLR123 LEVEL SHIFT
Q349 2SA1175 SWITCH
Q346 2SC2785 SWITCH
Q347 2SC2785 SWITCH
Q348 2SC2785 SWITCH
D315,316 ISS119 FLY WHEEL
Q338 2SC2785 SWITCH
Q339 2SC2785 SWITCH
D313,314 ISS119 FLY WHEEL
Q340,341 2SB740 MOTOR DRIVE
Q342,343 2SD789 MOTOR DRIVE
Q344 2SC2785 SWITCH
Q337 2SC2785 SWITCH
D317 ISS119 SWITCH
Q365 2SC2785 SWITCH
Q366 2SA1175 SWITCH
Q367 2SC2785 SWITCH
D311 ISS119 SWITCH
Q355 2SC2785 SWITCH
Q359 2SC2785 SWITCH
D328 MC921 SWITCH
Q324 2SC2785 SWITCH
Q325 2SA1175 SWITCH
D309 ISS119 SWITCH
Q368 2SC2785 SWITCH
Q331 2SC2785 SWITCH
Q356 2SA1175 BIAS
Q370 2SC2785 SWITCH
Q358 2SA1175 BIAS
Q335 ISS119 SWITCH
D327 10E-2
FWD TORQUE
Q360 2SC2785 BIAS
Q357 2SC2785 SWITCH
Q354 2SA1175 BIAS
Q362 2SC2785 SWITCH
Q363 2SC2785 SWITCH
Q330 2SC2785 SWITCH
Q333 2SC2785 SWITCH
Q334 2SC1061 MOTOR DRIVE
Q371 2SA1175 SWITCH
Q336 2SC2785 SWITCH
Q335 2SD788 SWITCH
Q372 2SC2785 SWITCH
D851 ISS119
Q851 2SC2785 SWITCH
Q371 2SC2785 BIAS
TH305
D852 ISS119
Q852 2SC2785 SWITCH
RD-7 BOARD
D001 GP-2S02A
RD-6 BOARD
D001 GP-2S02A
no mark : REC mode
[[ ]] : REV mode
L903 CTL HEAD
CN307 (WHT) CTL HEAD(X) CTL HEAD(Y)
CN310 (WHT) Vcc T REEL FG GND (E)
CN311 (RED) Vcc S REEL FG GND (E)
CN615 (WHT) HI CUT a HI CUT b BIAS CONT GND (E) AUDIO MUTE 2 REC PAUSE PB+DUB AUDIO MUTE 3
TO TUNER, AUDIO BLOCK AM-3 BOARD CN502
TO VIDEO BLOCK YC-25 BOARD CN004
CN306 (YEL) C RMT AV CONT REC P PB+DUB AUDIO SEL V MUTE V SEL
CN309 (BLK) HI CUT a HI CUT b AUDIO SEL VIDEO SEL SW 12V(E) SW 5V TRACON
TO POWER SUPPLY TIMER BLOCK TM-40 BOARD
CN312 (RED) MC RF SWP V.B.P COMP SYNC CTL GND 4.43MHZ REF
TO VIDEO BLOCK YC-25 BOARD CN008
CN609 (WHT) SW 5V GND (E) SW 12V(M) GND (M) SW 12V(E)
TO POWER SUPPLY, TIMER BLOCK PS-22 BOARD CN301
CN611 (BLK) PINCH PL (C) PINCH PL (S) PINCH PL (H)
CN610 (YEL) UNBRK PL (C) UNBRK PL (S) UNBRK PL (H)
REC · PAUSE
CAP. ROT
DRUM ROT
LOAD
UNLOAD
REEL STOP
REEL FWD
REEL LOW
REEL CUE/REV
PINCH S
TOP/END
CUE/REV
FF/REW
CAP STOP
DRUM STOP
CAP FWD
REEL FG
V MUTE
C-INS
TOP/END
LOAD
UN LOAD
PINCH S
REEL CUE/REV
REEL FWD
FF/REW
REEL LOW
REEL STOP


R (REEL MOTOR)
CS-3 (CASSETTE ON SWITCH)
CS-4 (CASSETTE IN SWITCH)
T
U
V
W
X
Y
Z
A1
B1
C1
D1
E1
F1
G1
H1
I1
no mark : REC mode
( ) : PB mode
< > : CUE mode
[ ] : FF/REW mode
(( )) : LOADING/THREADING mode
« » : EJECT mode
[[ ]] : REV mode
CN301 (WHT)
PG COIL (A)
PG COIL (S)
PG COIL (Y)
PG COIL (B)
CN302 (WHT)
DRUM +B
DRUM SERVO
DRUM GND
M901 DRUM MOTOR
CN303 (RED)
Vs
GND
Vcc
REVERSE
CN308 (BLK)
V+ (FG)
FG1
FG2
GND (FG)
CN304 (YEL)
REEL REV
REEL +B
SYS GND
REEL M
CN305 (RED)
LOAD MOTOR +
LOAD MOTOR −
CAPSTAN MOTOR BOARD
IC1 CX-877
D1 1S1555
Q1–Q6 2SD992A
DME
REEL MOTOR BOARD
D1 1N4148TP
Q1–Q6 2SD992
LM-8 BOARD
M904 LOADING/THREADING MOTOR
IC301
IC302 (1/2) μPC358C CTL AMP
IC303 (1/2) μPC4558C CAP FG AMP
IC304 (1/4) μPC324C LPF
IC305 (1/2) TC4053BP SWITCH
IC306 (1/4) μPC324C LPF
IC307 (1/3) TC4053BP SWITCH
IC308 (1/2) μPC358C AMP
Q310 2SC2785 SWITCH
Q311 2SA1175 BIAS
Q312 2SD789 MOTOR DRIVE
Q309 2SC2785 SWITCH
Q313 2SA1175 BIAS
Q314 2SC1475 MOTOR DRIVE
Q317 2SA1175 BIAS
Q319 2SC2785 BIAS
Q316 2SC2785 SWITCH
Q320 2SC1061 MOTOR DRIVE
Q315 2SC2785 SWITCH
D339,340 1SS119 SWITCH
Q326 2SC2785 SWITCH
Q327 2SA1175 SWITCH
Q318 2SC2785 SWITCH
Q322 2SC2785 SWITCH
Q307 2SC2785 SWITCH
Q332 2SC2785 REGULATOR
D326 RD6.2EB REGULATOR
Q303 2SC2785 SWITCH
Q352 2SC2785 SWITCH
Q364 2SC2785 SWITCH
D325 MC911 SWITCH
Q373 2SC2785 SWITCH
Q365 2SC2785 SWITCH
Q366 2SA1175 SWITCH
Q367 2SC2785 SWITCH
D311 1SS119 SWITCH
Q355 2SC2785 SWITCH
Q359 2SC2785 SWITCH
D328 MC921 SWITCH
Q324 2SC2785 SWITCH
Q325 2SA1175 SWITCH
D309 1SS119 SWITCH
D315,316 1SS119 FLY WHEEL
Q340,341 2SB740 MOTOR DRIVE
Q344 2SC2785 SWITCH
Q342,343 2SD789 MOTOR DRIVE
Q337 2SC2785 SWITCH
D317 1SS119 SWITCH
Q368 2SC2785 SWITCH
Q331 2SC2785 SWITCH
Q356 2SC2785 BIAS
Q370 2SC2785 SWITCH
Q358 2SA1175 BIAS
D335 1SS119 SWITCH
D327 10E-2
Q360 2SC2785 BIAS
Q357 2SC2785 SWITCH
Q354 2SC2785 BIAS
Q362 2SC2785 SWITCH
Q363 2SC2785 SWITCH
Q330 2SC2785 SWITCH
Q333 2SC2785 SWITCH
Q334 2SC1061 MOTOR DRIVE
Q371 2SA1175 SWITCH
Q335 2SD788 SWITCH
Q336 2SC2785 SWITCH
Q372 2SC2785 SWITCH
D851 1SS119
Q851 2SC2785 SWITCH
Q371 2SC2785 BIAS
D852 1SS119
Q852 2SC2785 SWITCH
Q301 2SC2785 SWITCH

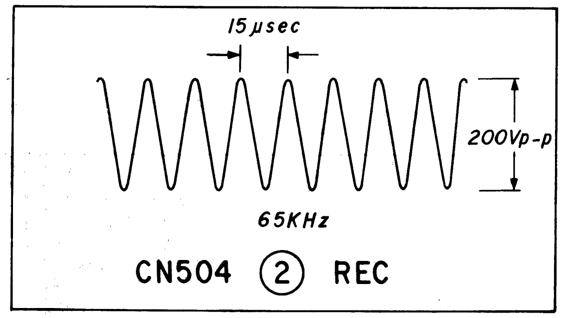
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

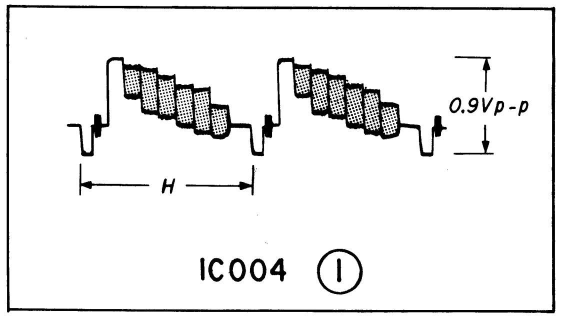
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ⏛ : Fusible resistor
- — : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.

The voltage value is measured using a digital tester (10MΩ/V).

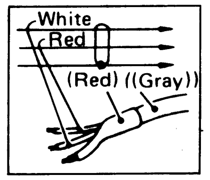
AM-3 BOARD



TU-39 BOARD



- Color code of sleeving over the end of the jacket.


White
Red
(Red) ((Gray))

- ○— indicates a lead wire mounted on the component side.
- ●— indicates a lead wire mounted on the printed side.
- ▩ Soldering side
- ▨ B + pattern
- ■ B – pattern

TU-39 (VIF, SIF, AFC, CHANNEL PRESET) **AM-3** (AUDIO RECORD/ PLAY BACK PROCESS

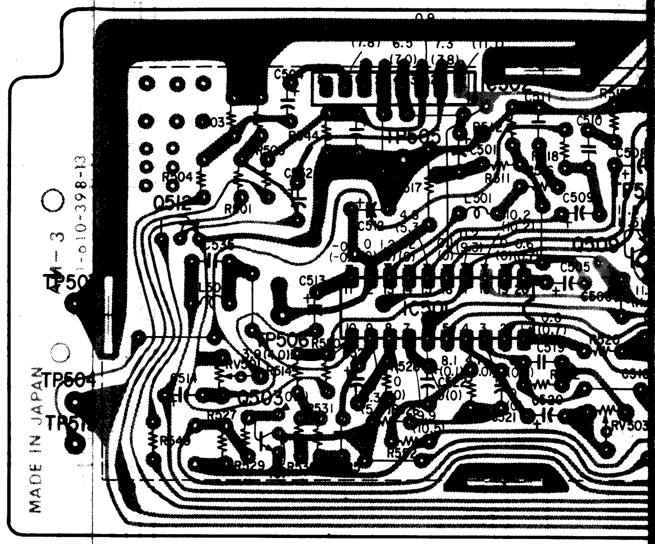
A B C D

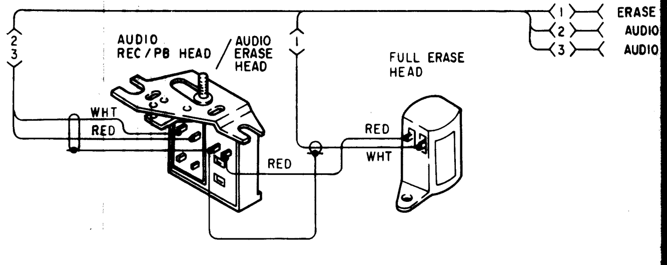
1 2 3 4 5 6 7 8 9 10

– Ref. No. TU-39 BOARD: 4000 series, AM-3 BOARD: 5500 series –

	A	B	C	D
IC		512	IC502 IC501	
Q		503		
D				
TP	503		505	
RV	504 513	RV501 506		RV503

[AM-3 BOARD]


MADE IN JAPAN
TP504


AUDIO REC/PB HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
WHT
RED
RED
RED
WHT
1
2
3
ERASE
AUDIO
AUDIO

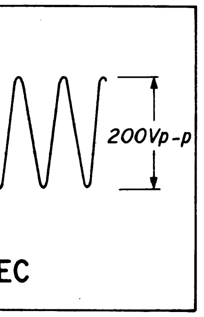
POWE
TIME
PS-22

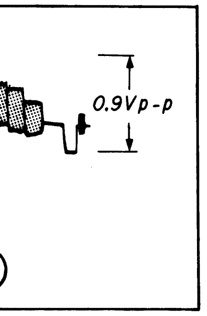
VIDE
YC-2

TU-39 (VIF, SIF, AFC, CHANNEL PRESET) AM-3 (AUDIO RECORD/PLAY BACK PROCESS) MT-4 (INTERMEDIATION)

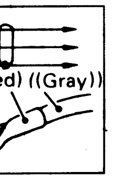
– Ref. No. TU-39 BOARD: 4000 series, AM-3 BOARD: 5500 series –

	A	B	C	D	E	F	G	H
IC Q		512	IC502 IC501 503		509 511	508 504	507 505, 506 510	501 502
D					507	506	501	508 503
TP RV	503 504 513	RV501	505 506	RV503	507 RV502 508	510 CT501	501 512	502 511

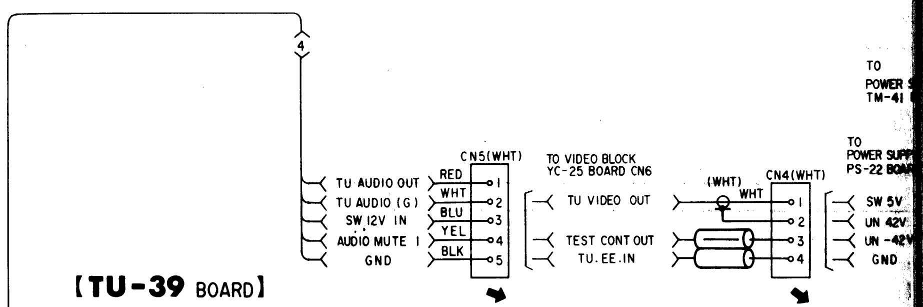


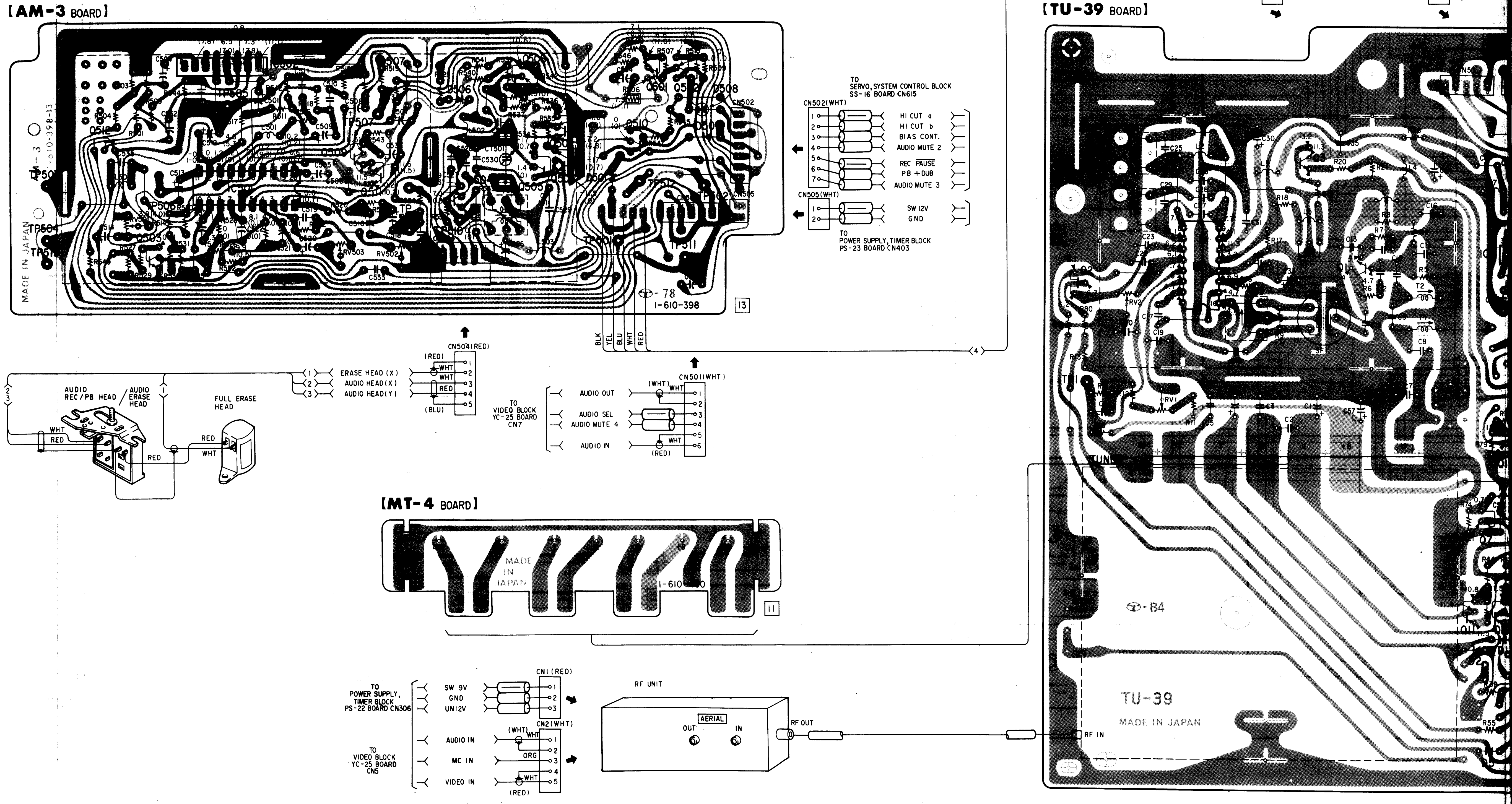


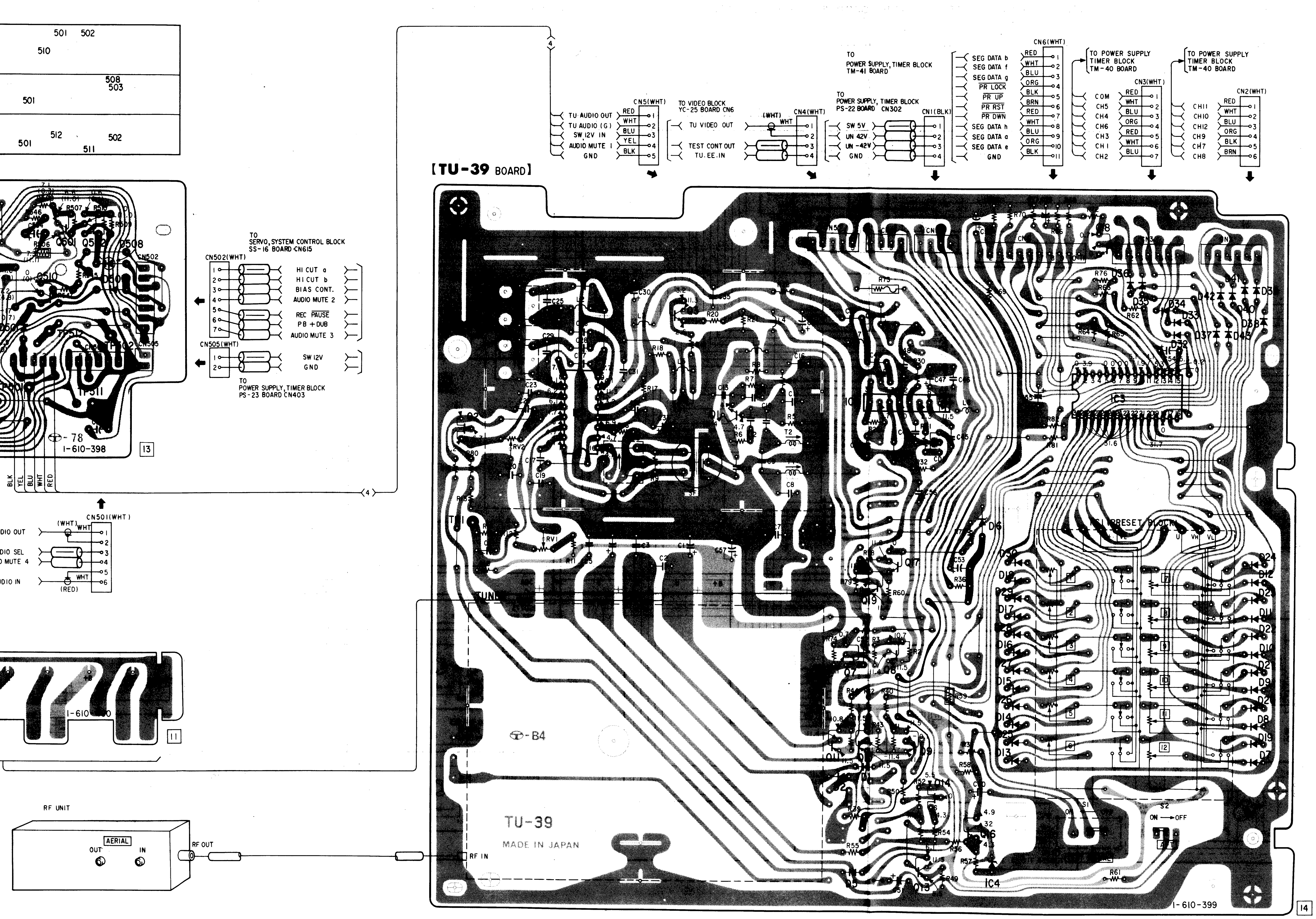
le of sleeving over the
e jacket.



tes a lead wire mount-
the component side.
tes a lead wire mount-
n the printed side.
ering side
pattern
pattern


4
TU AUDIO OUT
TU AUDIO (G)
SW 12V IN
AUDIO MUTE 1
GND
CN5(WHT)
RED
WHT
BLU
YEL
BLK
1
2
3
4
5
TO VIDEO BLOCK
YC-25 BOARD CN6
TU VIDEO OUT
TEST CONT OUT
TU. EE. IN
(WHT)
WHT
CN4(WHT)
1
2
3
4
TO
POWER
TM-41
TO
POWER SUPP
PS-22 BOA
SW 5V
UN 42V
UN -42V
GND


【AM-3 BOARD】
MADE IN JAPAN
1-610-398-13
⊕-78
1-610-398
13
TO
SERVO, SYSTEM CONTROL BLOCK
SS-16 BOARD CN615
CN502(WHT)
1
2
3
4
5
6
7
HI CUT a
HI CUT b
BIAS CONT.
AUDIO MUTE 2
REC PAUSE
PB + DUB
AUDIO MUTE 3
CN505(WHT)
1
2
SW 12V
GND
TO
POWER SUPPLY, TIMER BLOCK
PS-23 BOARD CN403
BLK
YEL
BLU
WHT
RED
4
CN504(RED)
(RED)
WHT
WHT
RED
(BLU)
1
2
3
4
5
ERASE HEAD (X)
AUDIO HEAD (X)
AUDIO HEAD (Y)
1
2
3
AUDIO REC/PB HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
WHT
RED
RED
RED
WHT
CN501(WHT)
(WHT)
WHT
WHT
(RED)
1
2
3
4
5
6
TO
VIDEO BLOCK
YC-25 BOARD
CN7
AUDIO OUT
AUDIO SEL
AUDIO MUTE 4
AUDIO IN
【MT-4 BOARD】
MADE IN JAPAN
1-610
11
TO
POWER SUPPLY,
TIMER BLOCK
PS-22 BOARD CN306
SW 9V
GND
UN 12V
CN1(RED)
1
2
3
TO
VIDEO BLOCK
YC-25 BOARD
CN5
AUDIO IN
MC IN
VIDEO IN
CN2(WHT)
(WHT)
WHT
ORG
WHT
(RED)
1
2
3
4
5
RF UNIT
AERIAL
OUT
IN
RF OUT
RF IN
【TU-39 BOARD】
⊕-B4
TU-39
MADE IN JAPAN

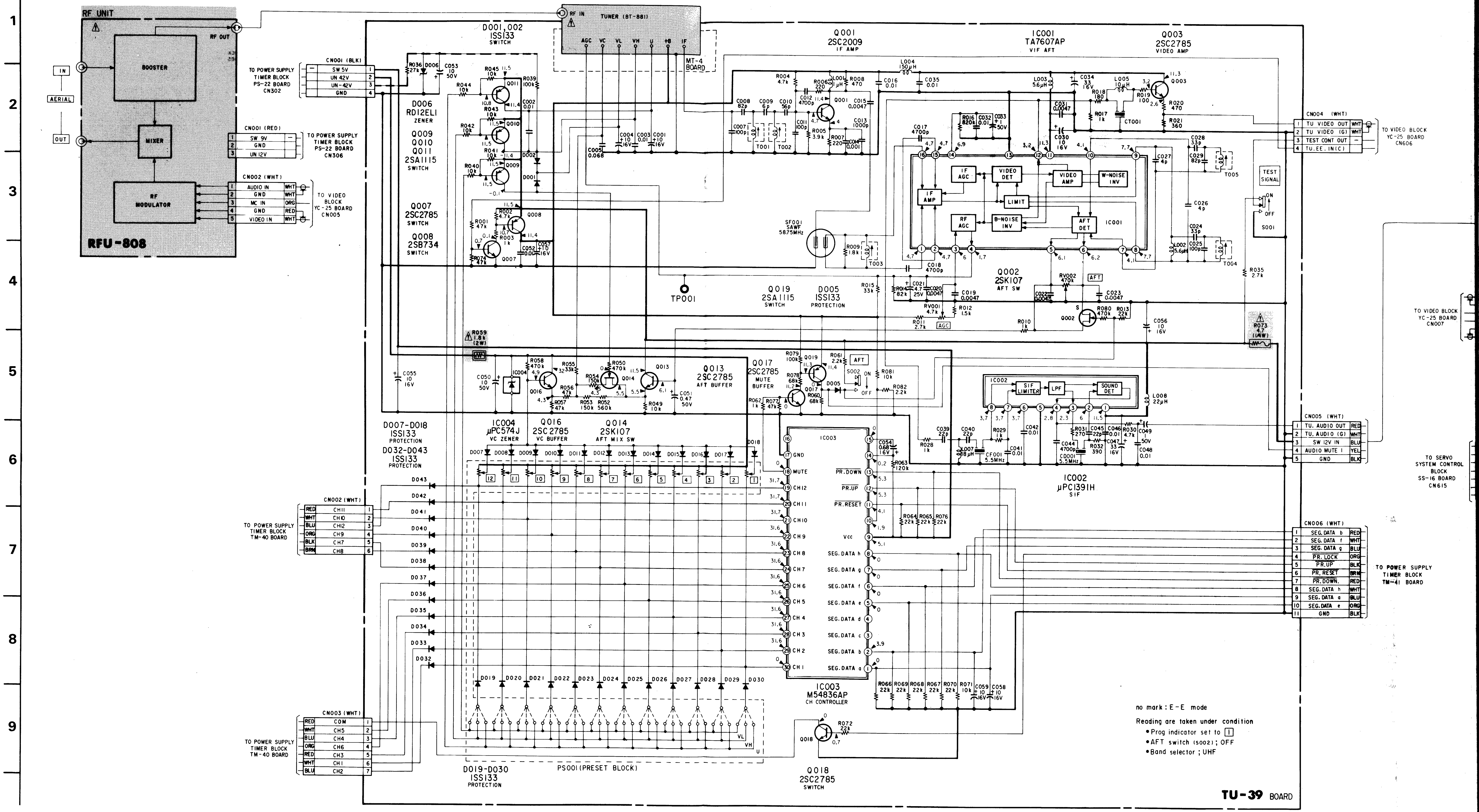

G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
501 502
510
508
503
501
512
502
501
511
TO
SERVO, SYSTEM CONTROL BLOCK
SS-16 BOARD CN615
CN502(WHT)
HI CUT a
HI CUT b
BIAS CONT.
AUDIO MUTE 2
REC PAUSE
PB + DUB
AUDIO MUTE 3
CN505(WHT)
SW 12V
GND
TO
POWER SUPPLY, TIMER BLOCK
PS-23 BOARD CN403
1-610-398
13
BLK
YEL
BLU
WHT
RED
CN501(WHT)
DIO OUT
DIO SEL
MUTE 4
DIO IN
(WHT)
WHT
(RED)
1-610
11
RF UNIT
AERIAL
OUT
IN
RF OUT
RF IN
CN5(WHT)
TU AUDIO OUT
TU AUDIO (G)
SW 12V IN
AUDIO MUTE 1
GND
RED
WHT
BLU
YEL
BLK
TO VIDEO BLOCK
YC-25 BOARD CN6
TU VIDEO OUT
TEST CONT OUT
TU.EE.IN
(WHT)
WHT
CN4(WHT)
TO
POWER SUPPLY, TIMER BLOCK
TM-41 BOARD
TO
POWER SUPPLY, TIMER BLOCK
PS-22 BOARD CN302
CN1(BLK)
SW 5V
UN 42V
UN -42V
GND
SEG DATA b
SEG DATA f
SEG DATA g
PR LOCK
PR UP
PR RST
PR DOWN
SEG DATA h
SEG DATA a
SEG DATA e
GND
CN6(WHT)
RED
WHT
BLU
ORG
BLK
BRN
RED
WHT
BLU
ORG
BLK
TO POWER SUPPLY
TIMER BLOCK
TM-40 BOARD
CN3(WHT)
COM
CH5
CH4
CH6
CH3
CH1
CH2
RED
WHT
BLU
ORG
RED
WHT
BLU
TO POWER SUPPLY
TIMER BLOCK
TM-40 BOARD
CN2(WHT)
CH11
CH10
CH12
CH9
CH7
CH8
RED
WHT
BLU
ORG
BLK
BRN
【TU-39 BOARD】
IC1
IC2
IC3
IC4
PRESET BLOCK
S1
S2
ON ⟶ OFF
TU-39
MADE IN JAPAN
-B4
1-610-399
14

IC · Q	D	TP · RV
18		
3	36,35 42,41 40,39 34 33 32 37 43 38	
1 2 IC1 IC2 IC3		
		RV2
	6	1 RV1
17	30 24	
19	18 12	
	29 23	
	17 11	
	28 22	
7,8	16 10	
	27 21	
	15 9	
	26 20	
	14 8	
11,10,9	25 19	
	10,13 7 1 2	
14		
16		
13 IC4	5	

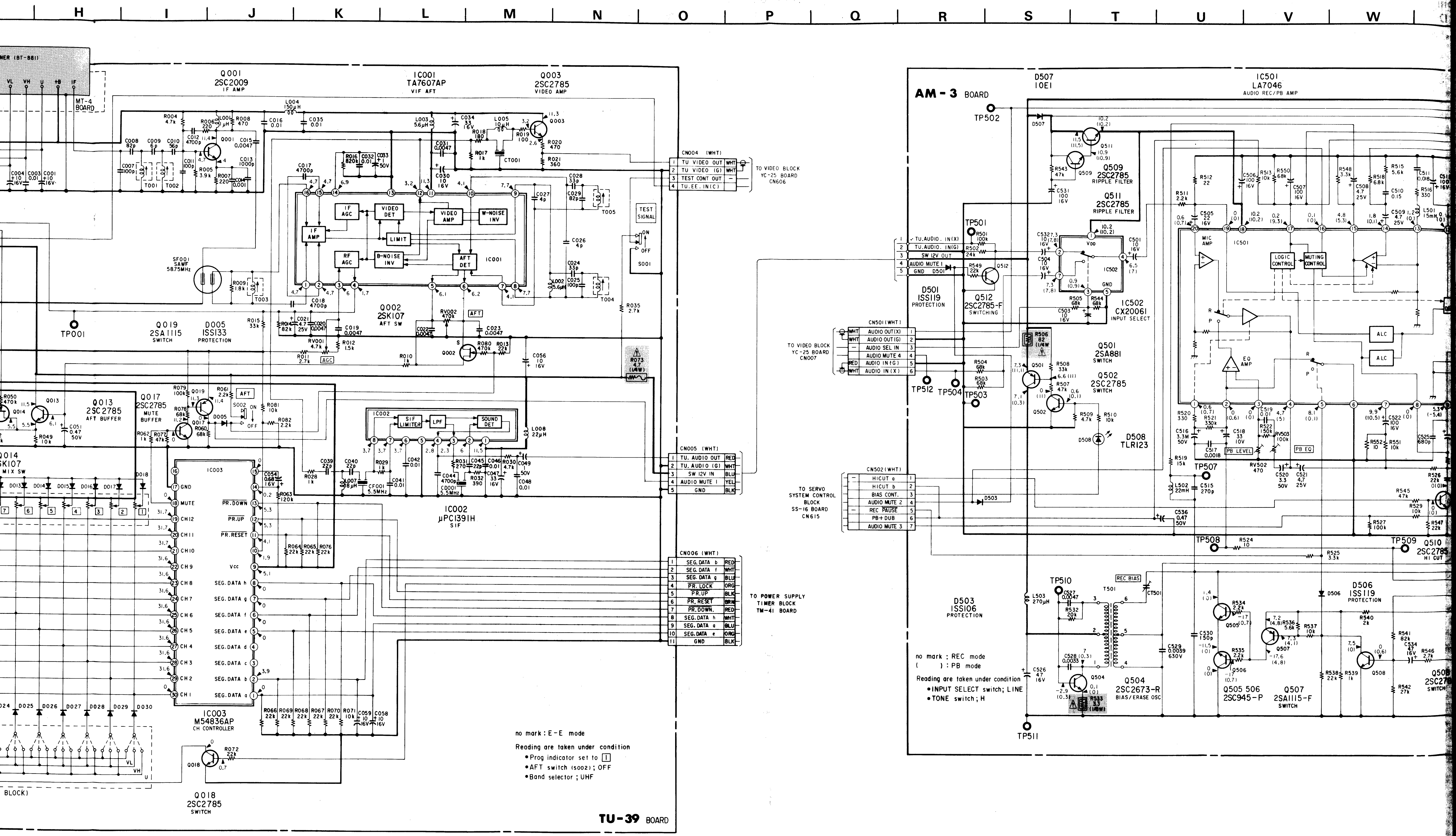
TU-39 (VIF, SIF, AFC, CHANNEL PRESET) **AM-3** (AUDIO RECORD/ PLAY BACK PROCESS) **MT-4** (INTERMEDIATION)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

– Ref. No. TU-39 BOARD: 4000 series, AM-3 BOARD: 5500 series, –


RF UNIT
BOOSTER
MIXER
RF MODULATOR
RF OUT
IN
AERIAL
OUT
RFU-808
CN001 (RED)
SW 9V
GND
UN 12V
TO POWER SUPPLY TIMER BLOCK PS-22 BOARD CN306
CN002 (WHT)
AUDIO IN
GND
MC IN
GND
VIDEO IN
TO VIDEO BLOCK YC-25 BOARD CN005
CN001 (BLK)
SW 5V
UN 42V
UN-42V
GND
TO POWER SUPPLY TIMER BLOCK PS-22 BOARD CN302
RF IN
TUNER (BT-881)
AGC VC VL VH U +B IF
MT-4 BOARD
D001,002 1SS133 SWITCH
D006 RD12EL1 ZENER
Q009 Q010 Q011 2SA1115 SWITCH
Q007 2SC2785 SWITCH
Q008 2SB734 SWITCH
Q001 2SC2009 IF AMP
IC001 TA7607AP VIF AFT
Q003 2SC2785 VIDEO AMP
IF AGC
VIDEO DET
VIDEO AMP
W-NOISE INV
IF AMP
LIMIT
RF AGC
B-NOISE INV
AFT DET
SF001 SAWF 58.75MHz
T001 T002 T003 T004 T005
TP001
Q019 2SA1115 SWITCH
D005 1SS133 PROTECTION
Q002 2SK107 AFT SW
AFT
AGC
CN004 (WHT)
TU VIDEO OUT
TU VIDEO (G)
TEST CONT OUT
TU.EE. INIC)
TO VIDEO BLOCK YC-25 BOARD CN606
TEST SIGNAL
ON OFF
S001
TO VIDEO BLOCK YC-25 BOARD CN007
R073 4.7 (1/4W)
R059 1.8k (2W)
Q013 2SC2785 AFT BUFFER
Q017 2SC2785 MUTE BUFFER
S002 ON OFF
IC002
SIF LIMITER
LPF
SOUND DET
L008 22μH
CN005 (WHT)
TU. AUDIO OUT
TU. AUDIO (G)
SW 12V IN
AUDIO MUTE I
GND
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN615
IC002 μPC1391H SIF
CF001 5.5MHz
D007-D018 1SS133 PROTECTION
D032-D043 1SS133 PROTECTION
IC004 μPC574J VC ZENER
Q016 2SC2785 VC BUFFER
Q014 2SK107 AFT MIX SW
IC003
GND MUTE CH12 CH11 CH10 CH9 CH8 CH7 CH6 CH5 CH4 CH3 CH2 CH1
PR.DOWN PR.UP PR.RESET Vcc
SEG. DATA h SEG. DATA g SEG. DATA f SEG. DATA e SEG. DATA d SEG. DATA c SEG. DATA b SEG. DATA a
IC003 M54836AP CH CONTROLLER
CN002 (WHT)
CH11 CH10 CH12 CH9 CH7 CH8
TO POWER SUPPLY TIMER BLOCK TM-40 BOARD
CN006 (WHT)
SEG. DATA b
SEG. DATA f
SEG. DATA g
PR. LOCK
PR.UP
PR. RESET
PR. DOWN.
SEG. DATA h
SEG. DATA a
SEG. DATA e
GND
TO POWER SUPPLY TIMER BLOCK TM-41 BOARD
D019-D030 1SS133 PROTECTION
PS001 (PRESET BLOCK)
CN003 (WHT)
COM CH5 CH4 CH6 CH3 CH1 CH2
TO POWER SUPPLY TIMER BLOCK TM-40 BOARD
Q018 2SC2785 SWITCH
TU-39 BOARD

no mark : E-E mode
Reading are taken under condition
- Prog indicator set to 1
- AFT switch (S002) ; OFF
- Band selector ; UHF


H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
TUNER (BT-881)
MT-4 BOARD
Q001 2SC2009 IF AMP
IC001 TA7607AP VIF AFT
Q003 2SC2785 VIDEO AMP
IF AGC
VIDEO DET
VIDEO AMP
W-NOISE INV
IF AMP
LIMIT
RF AGC
B-NOISE INV
AFT DET
SF001 SAWF 58.75MHz
TP001
Q019 2SA1115 SWITCH
D005 1SS133 PROTECTION
Q002 2SK107 AFT SW
AGC
AFT
TEST SIGNAL
S001
CN004 (WHT)
1 TU VIDEO OUT WHT
2 TU VIDEO (G) WHT
3 TEST CONT OUT —
4 TU.EE.IN(C)
TO VIDEO BLOCK YC-25 BOARD CN606
Q013 2SC2785 AFT BUFFER
Q017 2SC2785 MUTE BUFFER
Q014 2SK107 MIX SW
IC002 SIF LIMITER LPF SOUND DET
IC002 μPC1391H SIF
CN005 (WHT)
1 TU. AUDIO OUT RED
2 TU. AUDIO (G) WHT
3 SW 12V IN BLU
4 AUDIO MUTE I YEL
5 GND BLK
IC003
GND
MUTE
CH12
CH11
CH10
CH9
CH8
CH7
CH6
CH5
CH4
CH3
CH2
CH1
PR.DOWN
PR.UP
PR.RESET
Vcc
SEG. DATA h
SEG. DATA g
SEG. DATA f
SEG. DATA e
SEG. DATA d
SEG. DATA c
SEG. DATA b
SEG. DATA a
IC003 M54836AP CH CONTROLLER
CN006 (WHT)
1 SEG. DATA b RED
2 SEG. DATA f WHT
3 SEG. DATA g BLU
4 PR. LOCK ORG
5 PR.UP BLK
6 PR. RESET BRN
7 PR. DOWN. RED
8 SEG. DATA h WHT
9 SEG. DATA a BLU
10 SEG. DATA e ORG
11 GND BLK
TO POWER SUPPLY TIMER BLOCK TM-41 BOARD
Q018 2SC2785 SWITCH
BLOCK)
D507 10E1
IC501 LA7046 AUDIO REC/PB AMP
TP502
Q509 2SC2785 RIPPLE FILTER
Q511 2SC2785 RIPPLE FILTER
TP501
CN501 (WHT)
1 AUDIO OUT(X)
2 AUDIO OUT(G)
— AUDIO SEL IN
4 AUDIO MUTE 4
5 AUDIO IN (G)
6 AUDIO IN (X)
TO VIDEO BLOCK YC-25 BOARD CN007
1 TU.AUDIO. IN(X)
2 TU.AUDIO. IN(G)
3 SW 12V OUT
4 AUDIO MUTE I
5 GND D501
D501 1SS119 PROTECTION
Q512 2SC2785-F SWITCHING
IC502 CX20061 INPUT SELECT
Q501 2SA881 SWITCH
Q502 2SC2785 SWITCH
D508 TLR123
TP512
TP504
TP503
MIC AMP
LOGIC CONTROL
MUTING CONTROL
ALC
EQ AMP
PB LEVEL
PB EQ
TP507
CN502 (WHT)
— HICUT a
— HICUT b
BIAS CONT.
AUDIO MUTE 2
REC PAUSE
PB+DUB
AUDIO MUTE 3
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN615
TP508
TP509
Q510 2SC2785 HI CUT
TP510
REC BIAS
T501
CT501
D503 1SS106 PROTECTION
D506 1SS119 PROTECTION
Q504 2SC2673-R BIAS/ERASE OSC
Q505 506 2SC945-P
Q507 2SA1115-F SWITCH
Q508 2SC2785 SWITCH
TP511

no mark : E-E mode

Reading are taken under condition

- Prog indicator set to [1]
- AFT switch (S002) ; OFF
- Band selector ; UHF

TU-39 BOARD

AM-3 BOARD

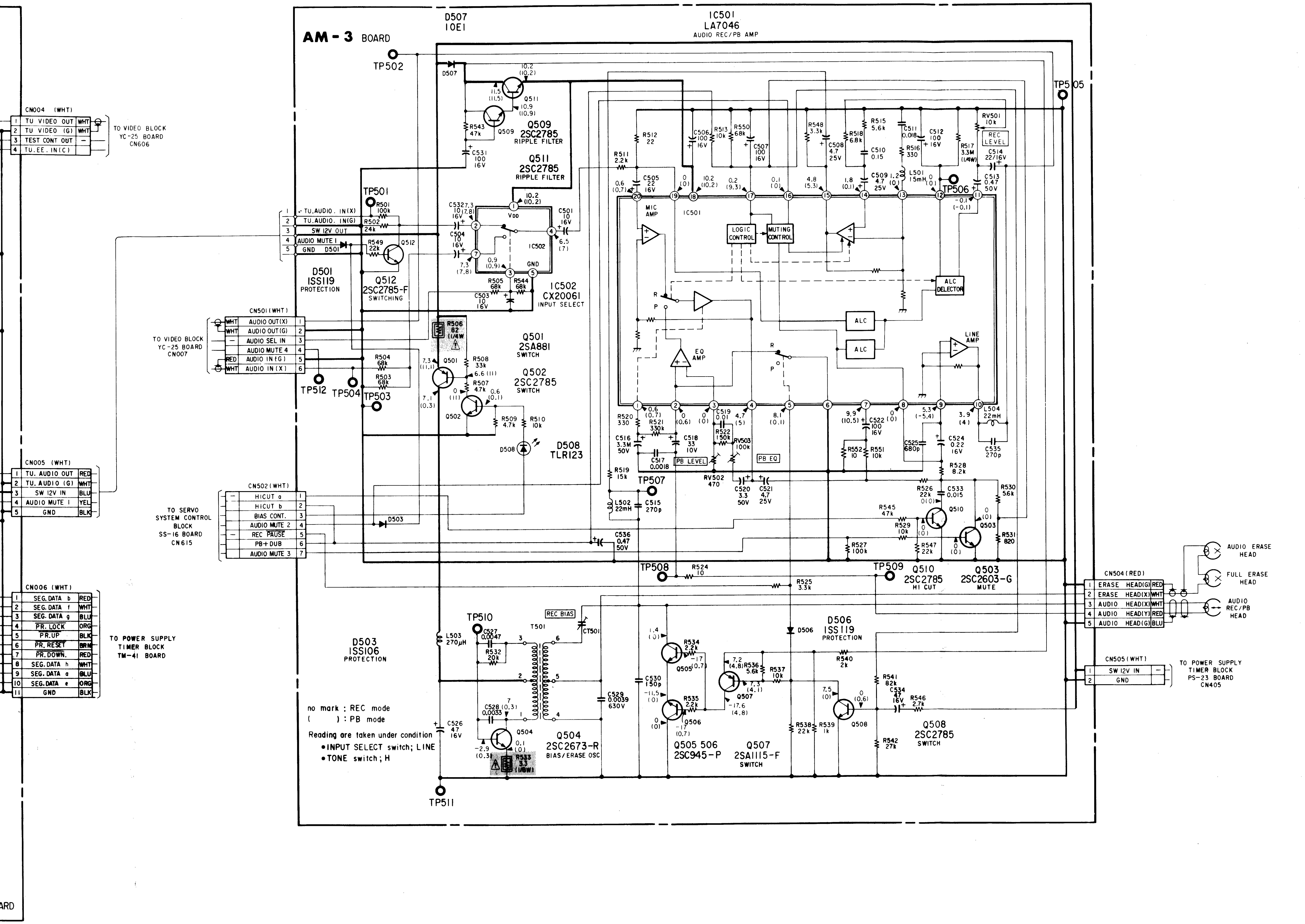
no mark : REC mode

( ) : PB mode

Reading are taken under condition

- INPUT SELECT switch ; LINE
- TONE switch ; H

O | P | Q | R | S | T | U | V | W | X | Y | Z | A1 | B1 | C1 | D1 | E


AM-3 BOARD
IC501
LA7046
AUDIO REC/PB AMP
D507
10E1
TP502
TP505
TP501
TP503
TP504
TP506
TP507
TP508
TP509
TP510
TP511
TP512
Q509
2SC2785
RIPPLE FILTER
Q511
2SC2785
RIPPLE FILTER
IC502
CX20061
INPUT SELECT
D501
1SS119
PROTECTION
Q512
2SC2785-F
SWITCHING
Q501
2SA881
SWITCH
Q502
2SC2785
SWITCH
D508
TLR123
D503
1SS106
PROTECTION
Q504
2SC2673-R
BIAS/ERASE OSC
Q505 506
2SC945-P
Q507
2SA1115-F
SWITCH
Q508
2SC2785
SWITCH
D506
1SS119
PROTECTION
Q510
2SC2785
HI CUT
Q503
2SC2603-G
MUTE
MIC AMP
LOGIC CONTROL
MUTING CONTROL
ALC
ALC DELECTOR
EQ AMP
LINE AMP
REC LEVEL
PB LEVEL
PB EQ
REC BIAS
T501
CT501
CN004 (WHT)
1 TU VIDEO OUT WHT
2 TU VIDEO (G) WHT
3 TEST CONT OUT
4 TU.EE.IN(C)
TO VIDEO BLOCK YC-25 BOARD CN606
CN005 (WHT)
1 TU. AUDIO OUT RED
2 TU. AUDIO (G) WHT
3 SW 12V IN BLU
4 AUDIO MUTE 1 YEL
5 GND BLK
CN006 (WHT)
1 SEG. DATA b RED
2 SEG. DATA f WHT
3 SEG. DATA g BLU
4 PR. LOCK ORG
5 PR. UP BLK
6 PR. RESET BRN
7 PR. DOWN. RED
8 SEG. DATA h WHT
9 SEG. DATA a BLU
10 SEG. DATA e ORG
11 GND BLK
TO POWER SUPPLY TIMER BLOCK TM-41 BOARD
1 TU.AUDIO. IN(X)
2 TU.AUDIO. IN(G)
3 SW 12V OUT
4 AUDIO MUTE 1
5 GND
CN501 (WHT)
1 AUDIO OUT(X)
2 AUDIO OUT(G)
3 AUDIO SEL IN
4 AUDIO MUTE 4
5 AUDIO IN(G)
6 AUDIO IN(X)
TO VIDEO BLOCK YC-25 BOARD CN007
CN502 (WHT)
1 HICUT a
2 HICUT b
3 BIAS CONT.
4 AUDIO MUTE 2
5 REC PAUSE
6 PB+DUB
7 AUDIO MUTE 3
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN615
CN504 (RED)
1 ERASE HEAD(G) RED
2 ERASE HEAD(X) WHT
3 AUDIO HEAD(X) WHT
4 AUDIO HEAD(Y) RED
5 AUDIO HEAD(G) BLU
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO REC/PB HEAD
CN505 (WHT)
1 SW 12V IN
2 GND
TO POWER SUPPLY TIMER BLOCK PS-23 BOARD CN405
no mark ; REC mode
( ) : PB mode
Reading are taken under condition
• INPUT SELECT switch; LINE
• TONE switch; H

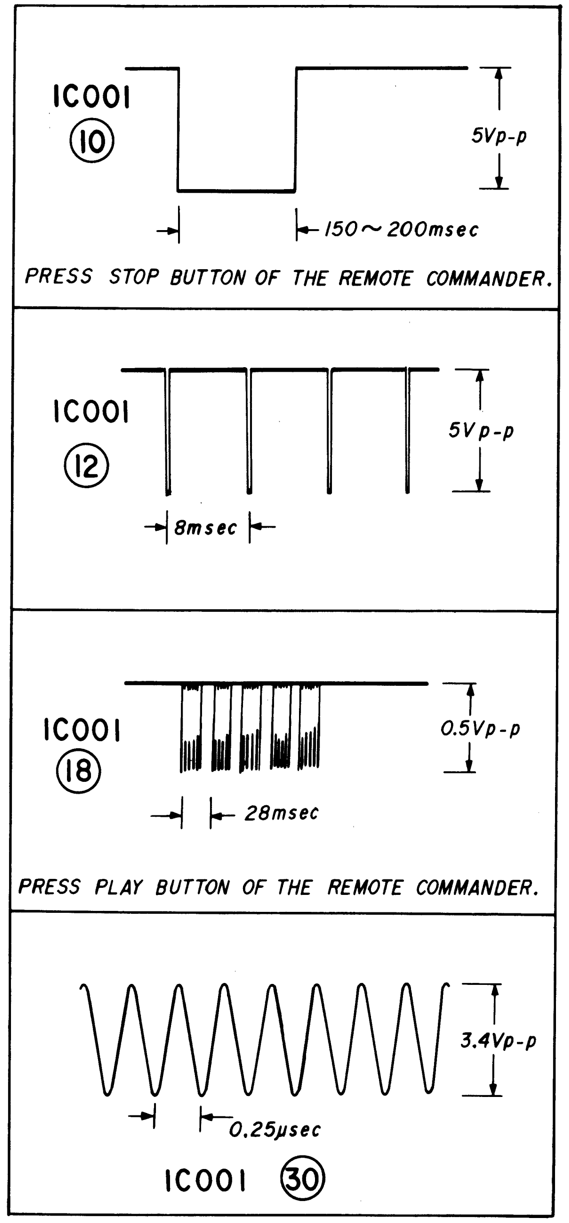
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▨ : Nonflammable resistor
- ▭ : Fusible resistor
- ── : B + bus.
- - - - : B − bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.

The voltage value is measured using a digital tester (10MΩ/V).

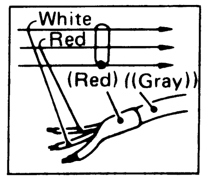
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

TM-41 BOARD.



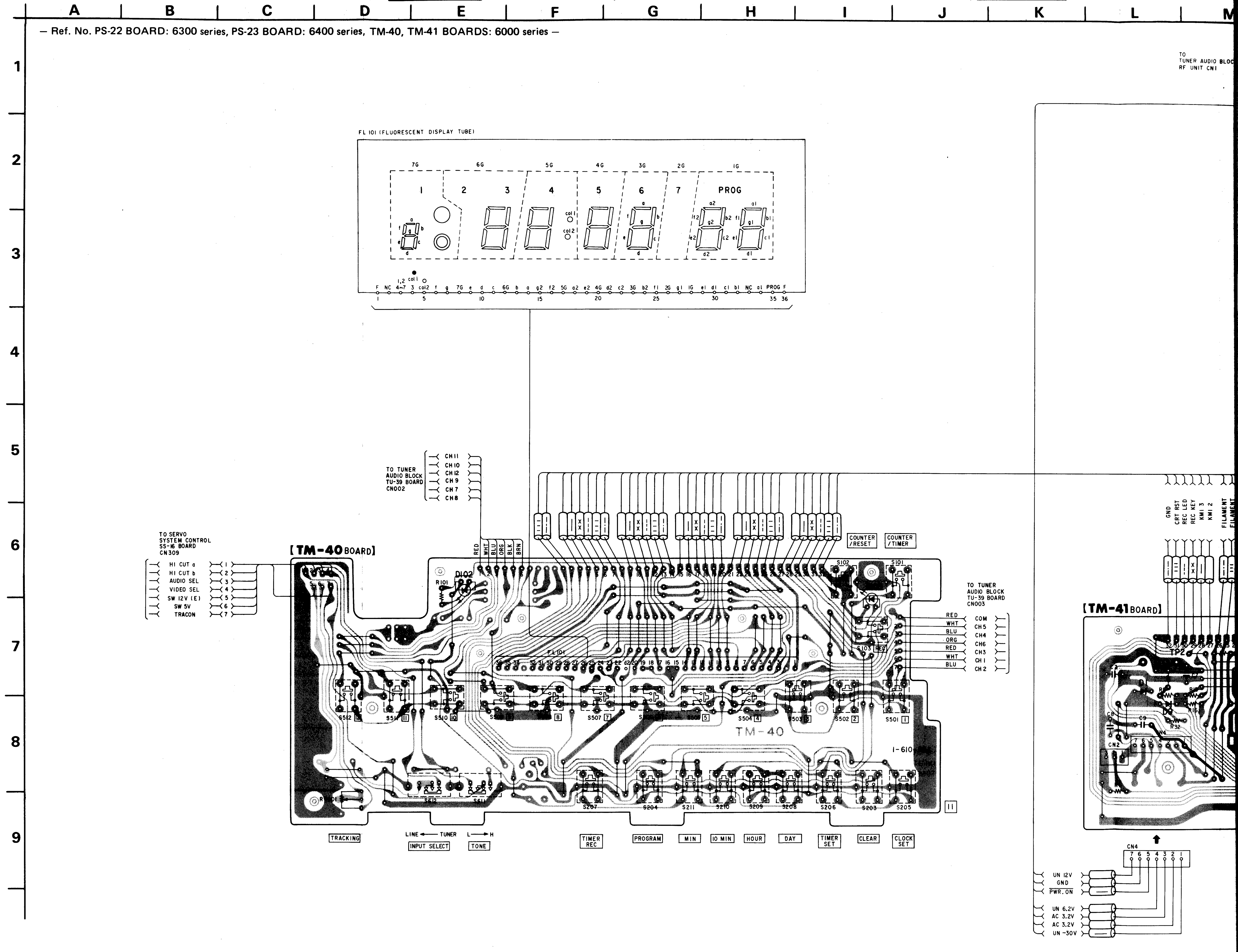
- Color code of sleeving over the end of the jacket.


White
Red
(Red) ((Gray))

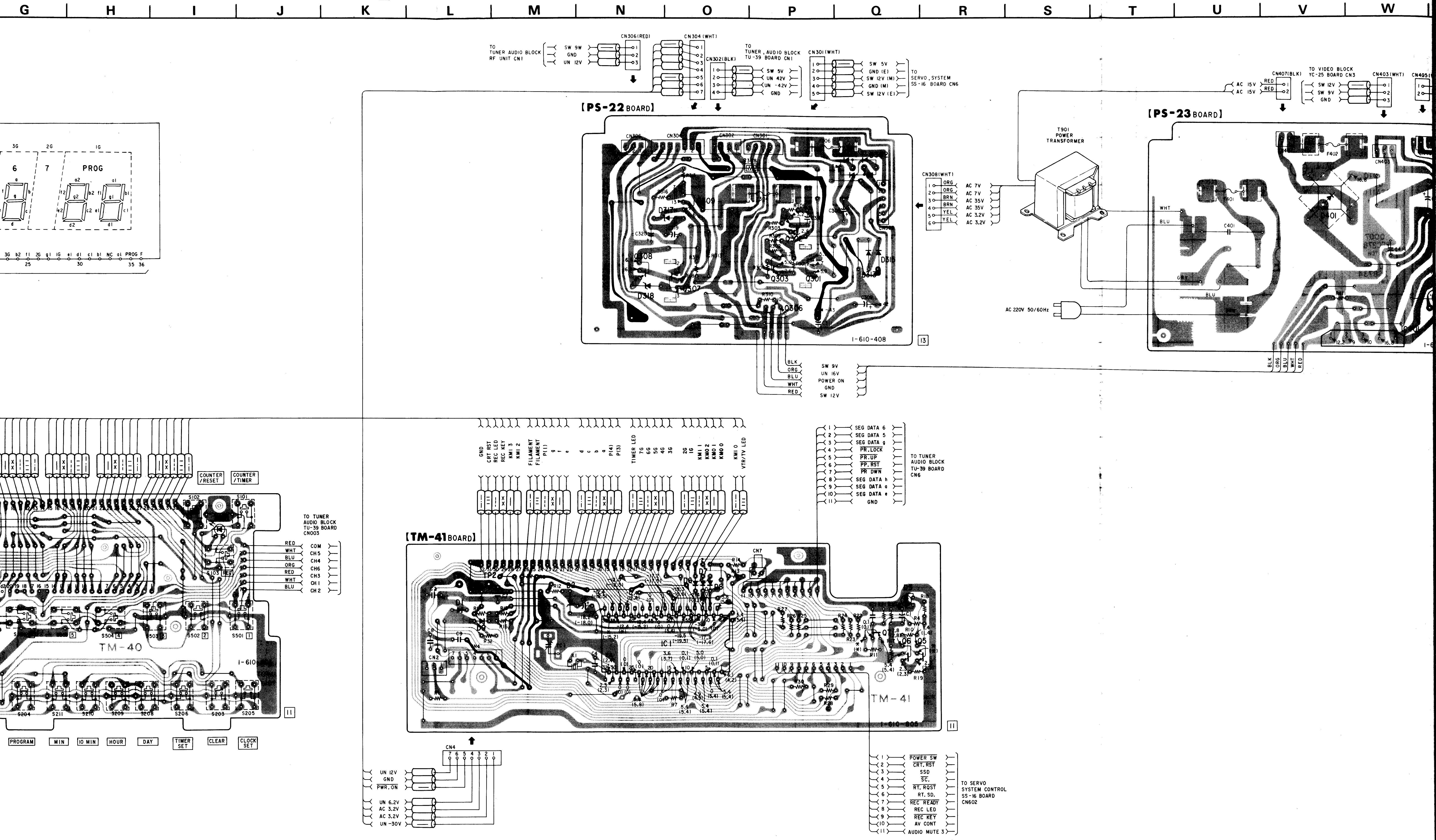
- ○— indicates a lead wire mounted on the component side.
- ●— indicates a lead wire mounted on the printed side.
- ▨ Soldering side
- ▨ B + pattern
- ■ B – pattern

PS-22 (POWER SUPPLY REGULATOR) **PS-23** (POWER SUPPLY REGULATOR) **TM-40** (TIMER INDICATOR REC RESET, TIMER COUNTER SWITCH TIMER PRESET SWITCH, CHANNEL SWITCH AND TONE INPUT SELECT SWITCH TRACKING) **TM-41** (TIMER CONTROL)

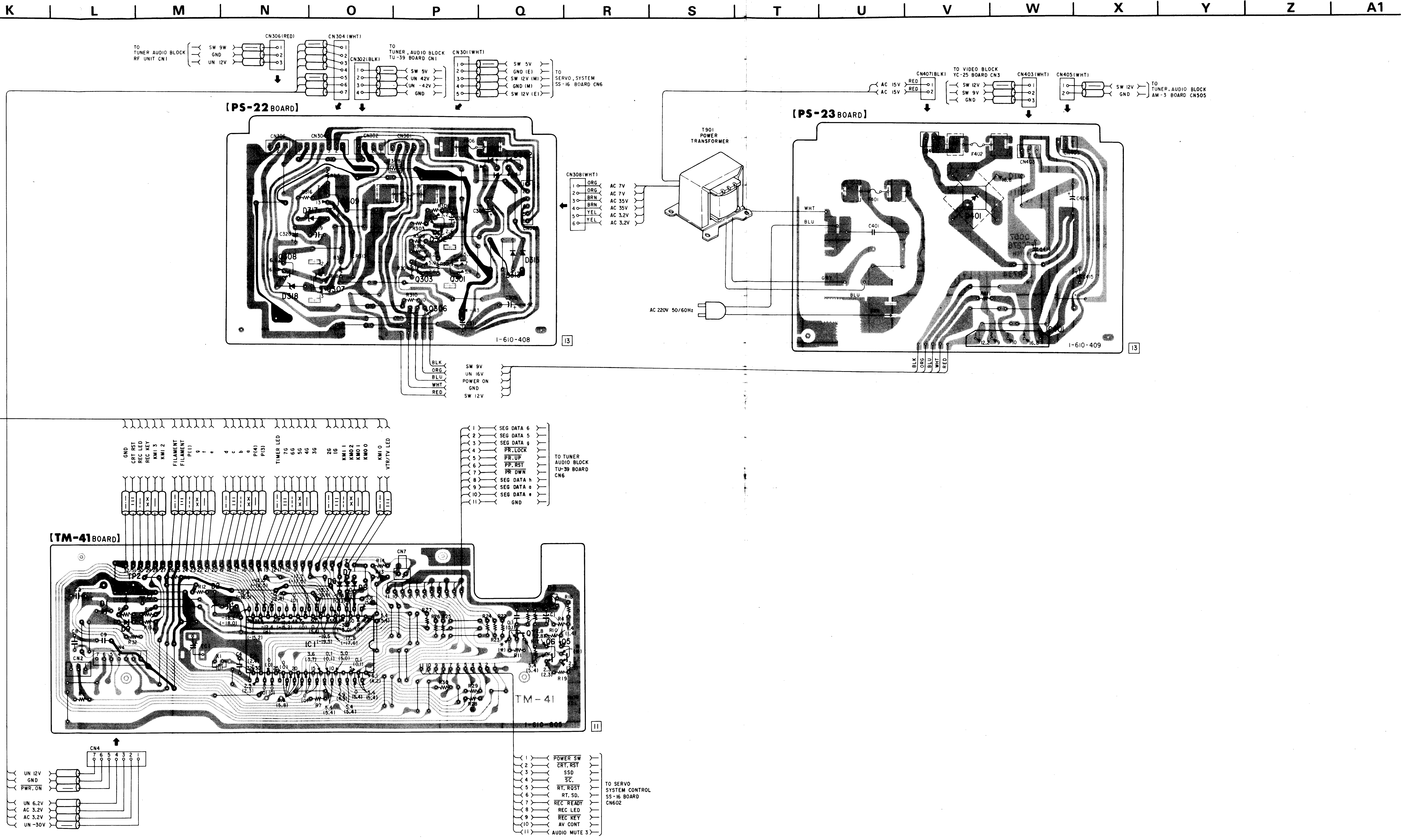
– Ref. No. PS-22 BOARD: 6300 series, PS-23 BOARD: 6400 series, TM-40, TM-41 BOARDS: 6000 series –


A
B
C
D
E
F
G
H
I
J
K
L
M
1
2
3
4
5
6
7
8
9
FL 101 (FLUORESCENT DISPLAY TUBE)
7G 6G 5G 4G 3G 2G 1G
1 2 3 4 5 6 7 PROG
a b c d e f g
col 1
col 2
a1 b1 c1 d1 e1 f1 g1
a2 b2 c2 d2 e2 f2 g2
1,2 col 1
F NC 4~7 3 col2 f g 7G e d c 6G b a g2 f2 5G a2 e2 4G d2 c2 3G b2 f1 2G g1 1G e1 d1 c1 b1 NC a1 PROG F
1 5 10 15 20 25 30 35 36
TO TUNER AUDIO BLOCK TU-39 BOARD CN002
CH 11
CH 10
CH 12
CH 9
CH 7
CH 8
TO SERVO SYSTEM CONTROL SS-16 BOARD CN309
HI CUT a 1
HI CUT b 2
AUDIO SEL 3
VIDEO SEL 4
SW 12V (E) 5
SW 5V 6
TRACON 7
[TM-40 BOARD]
RED WHT BLU ORG BLK BRN
D102
R101
FL101
COUNTER /RESET
COUNTER /TIMER
S102
S101
S103
REC
TO TUNER AUDIO BLOCK TU-39 BOARD CN003
RED COM
WHT CH5
BLU CH4
ORG CH6
RED CH3
WHT CH1
BLU CH2
S512
S511
S510
S507 7
S504 4
S502 2
S501 1
8
5
TM-40
1-610
S612
S611
S207
S204
S211
S210
S209
S208
S206
S203
S205
11
TRACKING
LINE ← TUNER
INPUT SELECT
L → H
TONE
TIMER REC
PROGRAM
MIN
10 MIN
HOUR
DAY
TIMER SET
CLEAR
CLOCK SET
TO TUNER AUDIO BLOC
RF UNIT CN1
GND
CRT RST
REC LED
REC KEY
KM1 3
KM1 2
FILAMENT
FILAMENT
[TM-41 BOARD]
TP2
C8
C9
R32
R16
CN2
CN4
7 6 5 4 3 2 1
UN 12V
GND
PWR. ON
UN 6.2V
AC 3.2V
AC 3.2V
UN -30V

RESET, TIMER COUNTER SWITCH
CHANNEL SWITCH AND TONE INPUT SELECT SWITCH TRACKING) **TM-41** (TIMER CONTROL)


G H I J K L M N O P Q R S T U V W
TO TUNER AUDIO BLOCK RF UNIT CN1
SW 9W
GND
UN 12V
CN306(RED)
CN304(WHT)
CN302(BLK)
TO TUNER, AUDIO BLOCK TU-39 BOARD CN1
SW 5V
UN 42V
UN -42V
GND
CN301(WHT)
SW 5V
GND (E)
SW 12V (M)
GND (M)
SW 12V (E)
TO SERVO, SYSTEM SS-16 BOARD CN6
[PS-22 BOARD]
CN306
CN304
CN302
CN301
CN308(WHT)
ORG
ORG
BRN
BRN
YEL
YEL
AC 7V
AC 7V
AC 35V
AC 35V
AC 3.2V
AC 3.2V
D316
D317
Q308
D318
Q307
Q303
Q301
Q306
D310
C320
R308
R310
1-610-408
13
BLK
ORG
BLU
WHT
RED
SW 9V
UN 16V
POWER ON
GND
SW 12V
T901 POWER TRANSFORMER
AC 220V 50/60Hz
AC 15V
AC 15V
RED
RED
CN407(BLK)
TO VIDEO BLOCK YC-25 BOARD CN3
SW 12V
SW 9V
GND
CN403(WHT)
CN405
[PS-23 BOARD]
F401
F402
C401
D401
CN403
WHT
BLU
GRY
BLU
16.8
12.2
9
10
16.8
3G
2G
1G
6
7
PROG
3G b2 f1 2G g1 1G e1 d1 c1 b1 NC a1 PROG F
25
30
35 36
COUNTER /RESET
COUNTER /TIMER
S102
S101
S103
REC
TO TUNER AUDIO BLOCK TU-39 BOARD CN003
RED
WHT
BLU
ORG
RED
WHT
BLU
COM
CH5
CH4
CH6
CH3
CH1
CH2
S504 4
S503 3
S502 2
S501 1
TM-40
1-610
S204
S211
S210
S209
S208
S206
S203
S205
11
PROGRAM
MIN
10 MIN
HOUR
DAY
TIMER SET
CLEAR
CLOCK SET
GND
CRT RST
REC LED
REC KEY
KMI 3
KMI 2
FILAMENT
FILAMENT
P(1)
g
f
e
d
c
b
a
P(4)
P(3)
TIMER LED
7G
6G
5G
4G
3G
2G
1G
KMI 1
KMO 2
KMO 1
KMO 0
KMI 0
VTR/TV LED
[TM-41 BOARD]
TP2
CN7
CN2
CN4
IC1
R12
R32
R27
R26
R25
R24
R23
R22
R18
R19
R10
R11
R7
R29
R30
C8
C9
Q7
Q6
Q5
TM-41
1-610-805
11
1 SEG DATA 6
2 SEG DATA 5
3 SEG DATA g
4 $\overline{\text{PR.LOCK}}$
5 $\overline{\text{PR.UP}}$
6 $\overline{\text{PP.RST}}$
7 $\overline{\text{PR DWN}}$
8 SEG DATA h
9 SEG DATA a
10 SEG DATA e
11 GND
TO TUNER AUDIO BLOCK TU-39 BOARD CN6
CN4
7 6 5 4 3 2 1
UN 12V
GND
$\overline{\text{PWR.ON}}$
UN 6.2V
AC 3.2V
AC 3.2V
UN -30V
1 $\overline{\text{POWER SW}}$
2 $\overline{\text{CRT.RST}}$
3 SSD
4 $\overline{\text{SC.}}$
5 $\overline{\text{RT. RQST}}$
6 RT. SD.
7 $\overline{\text{REC READY}}$
8 REC LED
9 $\overline{\text{REC KEY}}$
10 AV CONT
11 AUDIO MUTE 3
TO SERVO SYSTEM CONTROL SS-16 BOARD CN602

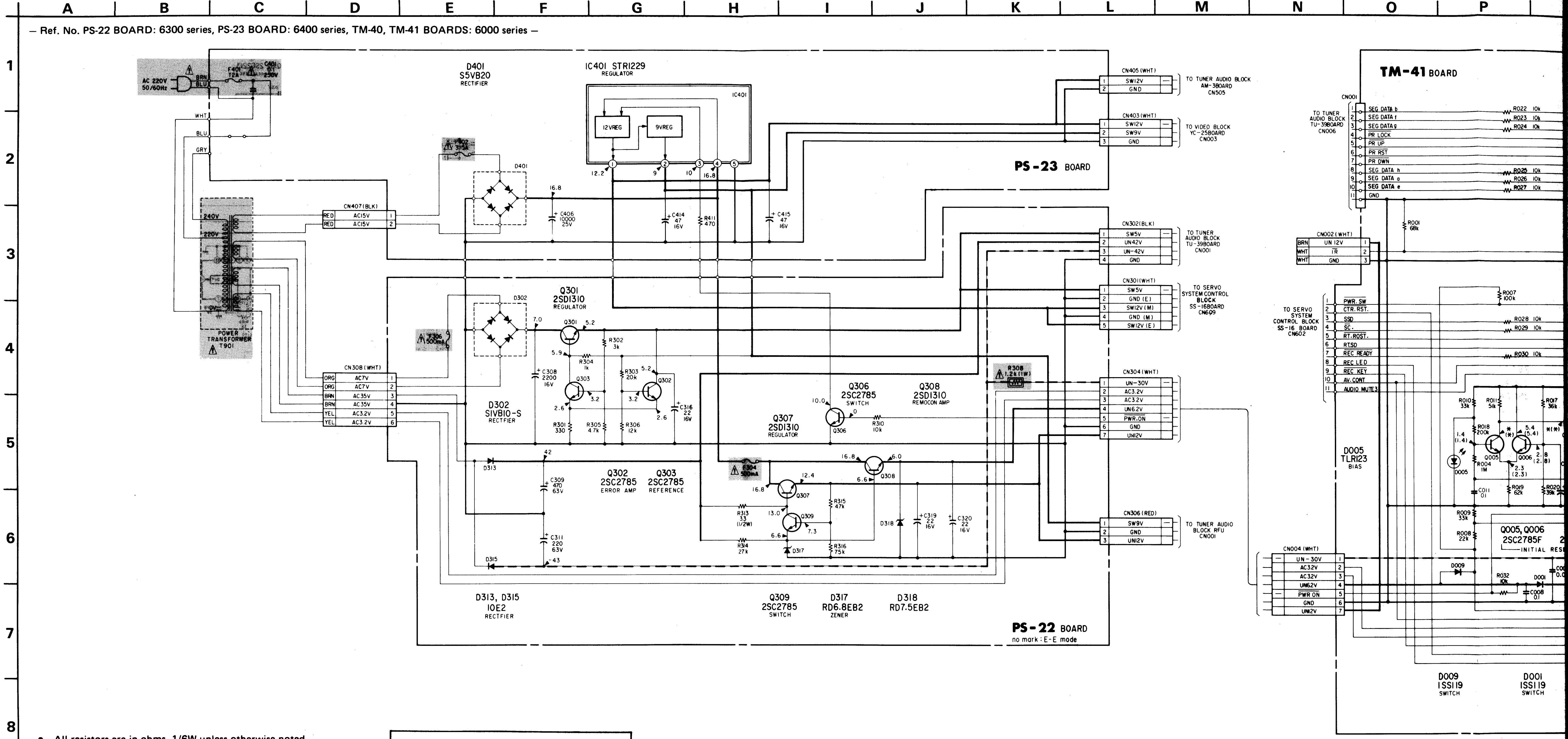
-41 (TIMER CONTROL)


K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
A1
TO TUNER AUDIO BLOCK RF UNIT CN1
SW 9W
GND
UN 12V
CN306(RED)
CN304(WHT)
CN302(BLK)
TO TUNER, AUDIO BLOCK TU-39 BOARD CN1
SW 5V
UN 42V
UN -42V
GND
CN301(WHT)
SW 5V
GND (E)
SW 12V (M)
GND (M)
SW 12V (E)
TO SERVO, SYSTEM SS-16 BOARD CN6
【PS-22 BOARD】
CN308(WHT)
ORG
ORG
BRN
BRN
YEL
YEL
AC 7V
AC 7V
AC 35V
AC 35V
AC 3.2V
AC 3.2V
1-610-408
13
BLK
ORG
BLU
WHT
RED
SW 9V
UN 16V
POWER ON
GND
SW 12V
T901 POWER TRANSFORMER
WHT
BLU
GRY
BLU
AC 220V 50/60Hz
AC 15V
AC 15V
RED
RED
CN407(BLK)
TO VIDEO BLOCK YC-25 BOARD CN3
SW 12V
SW 9V
GND
CN403(WHT)
CN405(WHT)
SW 12V
GND
TO TUNER, AUDIO BLOCK AM-3 BOARD CN505
【PS-23 BOARD】
F402
F401
C401
D401
1-610-409
13
BLK
ORG
BLU
WHT
RED
GND
CRT RST
REC LED
REC KEY
KMI 3
KMI 2
FILAMENT
FILAMENT
P(1)
g
f
e
d
c
b
a
P(4)
P(3)
TIMER LED
7G
6G
5G
4G
3G
2G
1G
KMI 1
KMO 2
KMO 1
KMO 0
KMI 0
VTR/TV LED
1 SEG DATA 6
2 SEG DATA 5
3 SEG DATA g
4 PR.LOCK
5 PR.UP
6 PP.RST
7 PR DWN
8 SEG DATA h
9 SEG DATA a
10 SEG DATA e
11 GND
TO TUNER AUDIO BLOCK TU-39 BOARD CN6
【TM-41 BOARD】
CN7
IC1
CN2
TM-41
11
CN4
UN 12V
GND
PWR. ON
UN 6.2V
AC 3.2V
AC 3.2V
UN -30V
1 POWER SW
2 CRT. RST
3 SSD
4 SC.
5 RT. RQST
6 RT. SD.
7 REC READY
8 REC LED
9 REC KEY
10 AV CONT
11 AUDIO MUTE 3
TO SERVO SYSTEM CONTROL SS-16 BOARD CN602

POWER SUPPLY, TIMER   POWER SUPPLY, TIMER

PS-22 (POWER SUPPLY REGULATOR) **PS-23** (POWER SUPPLY REGULATOR) **TM-40** (TIMER INDICATOR REC RESET, TIMER COUNTER SWITCH TIMER PRESET SWITCH, CHANNEL SWITCH AND TONE INPUT SELECT SWITCH TRACKING) **TM-41** (TIMER CONTROL)

– Ref. No. PS-22 BOARD: 6300 series, PS-23 BOARD: 6400 series, TM-40, TM-41 BOARDS: 6000 series –



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
1
2
3
4
5
6
7
8
AC 220V 50/60Hz
F401 T2A
C401 250V
WHT
BLU
GRY
240V
220V
POWER TRANSFORMER T901
D401 S5VB20 RECTIFIER
IC401 STR1229 REGULATOR
12VREG
9VREG
F302
CN407 (BLK)
RED AC15V
CN308 (WHT)
ORG AC7V
BRN AC35V
YEL AC3.2V
C406 10000 25V
C414 47 16V
R411 470
C415 47 16V
Q301 2SD1310 REGULATOR
D302 S1VB10-S RECTFIER
F306 500mA
C308 2200 16V
R302 3k
R303 20k
R304 1k
R301 330
R305 4.7k
R306 12k
C316 22 16V
Q302 2SC2785 ERROR AMP
Q303 2SC2785 REFERENCE
D313
D315
C309 470 63V
C311 220 63V
D313, D315 10E2 RECTFIER
F304 500mA
Q306 2SC2785 SWITCH
Q307 2SD1310 REGULATOR
Q308 2SD1310 REMOCON AMP
Q309 2SC2785 SWITCH
D317 RD6.8EB2 ZENER
D318 RD7.5EB2
R308 1.2k (1W)
R310 10k
R313 33 (1/2W)
R314 27k
R315 47k
R316 75k
C319 22 16V
C320 22 16V
PS-23 BOARD
PS-22 BOARD
no mark : E-E mode
CN405 (WHT)
SW12V
GND
TO TUNER AUDIO BLOCK AM-38OARD CN505
CN403 (WHT)
SW9V
TO VIDEO BLOCK YC-25BOARD CN003
CN302 (BLK)
SW5V
UN42V
UN-42V
TO TUNER AUDIO BLOCK TU-39BOARD CN001
CN301 (WHT)
GND (E)
SW12V (M)
GND (M)
SW12V (E)
TO SERVO SYSTEM CONTROL BLOCK SS-16BOARD CN609
CN304 (WHT)
UN-30V
AC3.2V
UN6.2V
PWR.ON
UN12V
CN306 (RED)
TO TUNER AUDIO BLOCK RFU CN001
TM-41 BOARD
CN001
TO TUNER AUDIO BLOCK TU-39BOARD CN006
SEG DATA b
SEG DATA f
SEG DATA g
PR LOCK
PR UP
PR RST
PR DWN
SEG DATA h
SEG DATA a
SEG DATA e
R022 10k
R023 10k
R024 10k
R025 10k
R026 10k
R027 10k
R001 68k
CN002 (WHT)
UN 12V
IR
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN602
PWR. SW
CTR. RST.
SSD
SC.
RT. RDST.
RTSD
REC READY
REC LED
REC KEY
AV. CONT
AUDIO MUTE3
R007 100k
R028 10k
R029 10k
R030 10k
D005 TLR123 BIAS
Q005
Q006
Q005, Q006 2SC2785F
INITIAL RES
CN004 (WHT)
UN-30V
AC32V
UN62V
PWR ON
UN12V
D009 1SS119 SWITCH
D001 1SS119 SWITCH

- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▨ : Nonflammable resistor
- ⏛ : Fusible resistor
- —— : B + bus.
- – – – : B – bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.

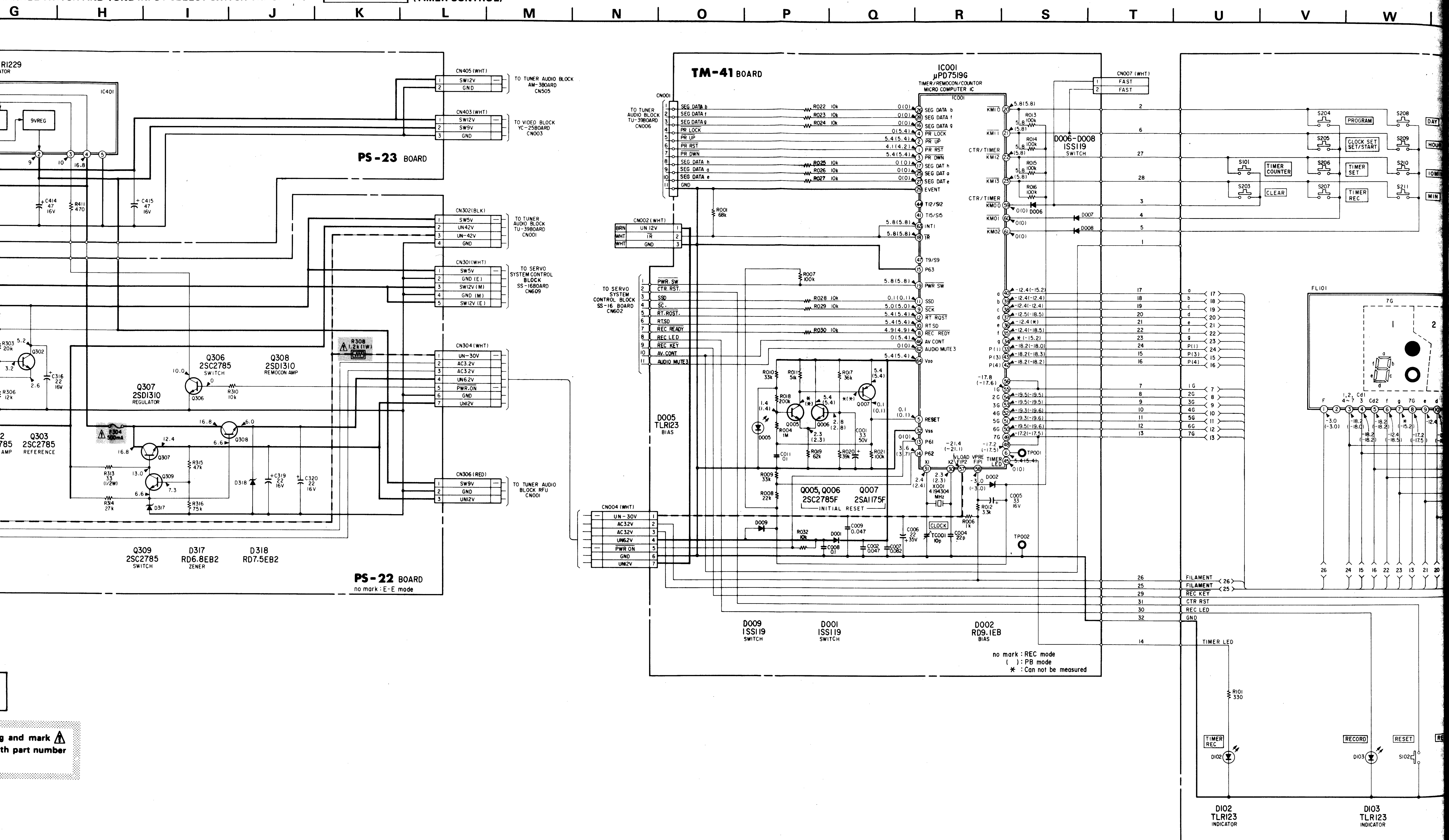
The voltage value is measured using a digital tester (10MΩ/V).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

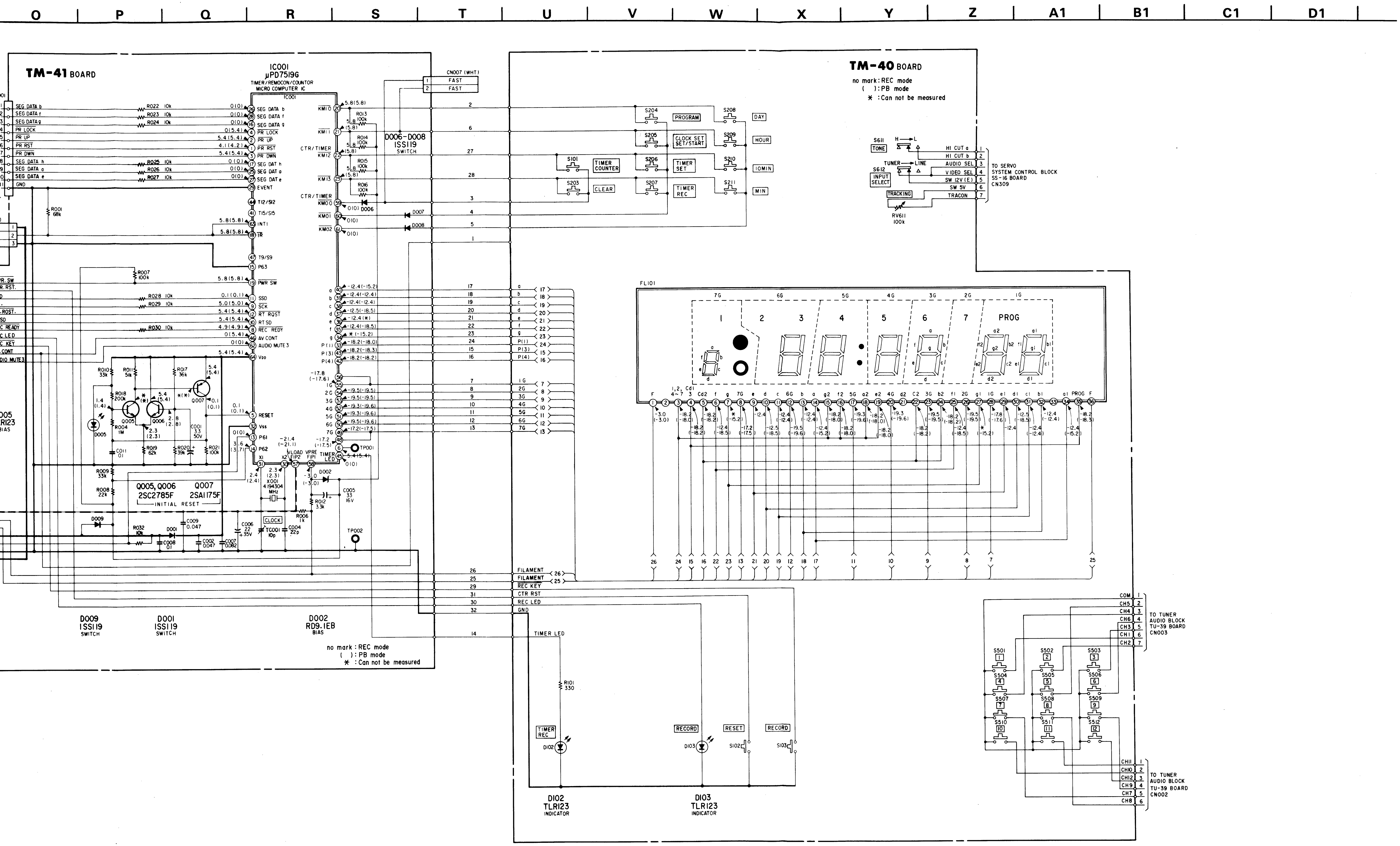
When indicating parts by reference number, please include the board name.

ESET, TIMER COUNTER SWITCH
HANNEL SWITCH AND TONE INPUT SELECT SWITCH TRACKING)

TM-41 (TIMER CONTROL)

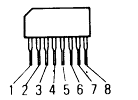

G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
R1229
IC401
9VREG
PS-23 BOARD
CN405 (WHT)
SW12V
GND
TO TUNER AUDIO BLOCK AM-380ARD CN505
CN403 (WHT)
SW9V
TO VIDEO BLOCK YC-25BOARD CN003
C414 47 16V
R411 470
C415 47 16V
CN302 (BLK)
SW5V
UN42V
UN-42V
TO TUNER AUDIO BLOCK TU-398OARD CN001
CN301 (WHT)
GND (E)
SW12V (M)
GND (M)
SW12V (E)
TO SERVO SYSTEM CONTROL BLOCK SS-168OARD CN609
R303 20k
Q302
C316 22 16V
R306 12k
Q306 2SC2785 SWITCH
Q308 2SD1310 REMOCON AMP
Q307 2SD1310 REGULATOR
R310 10k
R308 1.2k (1W)
CN304 (WHT)
UN-30V
AC3.2V
UN6.2V
PWR.ON
UN12V
Q303 2SC2785 REFERENCE
F304 500mA
Q307
Q308
R315 47k
Q309
R313 33 (1/2W)
R314 27k
R316 75k
D317
D318
C319 22 16V
C320 22 16V
CN306 (RED)
TO TUNER AUDIO BLOCK RFU CN001
Q309 2SC2785 SWITCH
D317 RD6.8EB2 ZENER
D318 RD7.5EB2
PS-22 BOARD
no mark : E-E mode
TM-41 BOARD
IC001 µPD7519G TIMER/REMOCON/COUNTOR MICRO COMPUTER IC
CN001
TO TUNER AUDIO BLOCK TU-398OARD CN006
SEG DATA b
SEG DATA f
SEG DATA g
PR LOCK
PR UP
PR RST
PR DWN
SEG DATA h
SEG DATA a
SEG DATA e
GND
R022 10k
R023 10k
R024 10k
R025 10k
R026 10k
R027 10k
EVENT
R001 68k
CN002 (WHT)
BRN
WHT
UN 12V
TR
T12/SI2
T15/SI5
INT1
T9/S9
P63
R007 100k
PWR SW
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN602
CTR.RST.
SSD
SC.
RT.RQST.
RTSD
REC READY
REC LED
REC KEY
AV.CONT
AUDIO MUTE3
R028 10k
R029 10k
R030 10k
SCK
RT RQST
AV CONT
AUDIO MUTE 3
Vdd
RESET
Vss
P61
P62
D005 TLR123 BIAS
Q005
Q006
Q007
R018 200k
R004 1M
R019 62k
R020 39k
R021 100k
R009 33k
R008 22k
Q005, Q006 2SC2785F
Q007 2SA1175F
INITIAL RESET
X001 4.194304 MHz
CN004 (WHT)
UN-30V
AC32V
UN6.2V
PWR ON
UN12V
D009
R032 10k
D001
C008 01
C009 0.047
C002 0.047
C007 0.082
C006 22 35V
TC001 10p
C004 22p
CLOCK
R006 1k
R012 3.3k
C005 33 16V
TP001
TP002
D002
D009 1SS119 SWITCH
D001 1SS119 SWITCH
D002 RD9.1EB BIAS
CN007 (WHT)
FAST
KMI0
KMI1
KMI2
KMI3
KMO0
KMO1
KMO2
CTR/TIMER
R013 100k
R014 100k
R015 100k
R016 100k
D006-D008 1SS119 SWITCH
D006
D007
D008
TIMER LED
S204 PROGRAM
S208 DAY
S205 CLOCK SET SET/START
S209 HOUR
S101 TIMER COUNTER
S206 TIMER SET
S210
S203 CLEAR
S207 TIMER REC
S211 MIN
FL101
FILAMENT
REC KEY
CTR RST
REC LED
GND
R101 330
TIMER REC
RECORD
RESET
D102
D103
S102
D102 TLR123 INDICATOR
D103 TLR123 INDICATOR
no mark : REC mode
( ) : PB mode
✱ : Can not be measured

g and mark ⚠
th part number

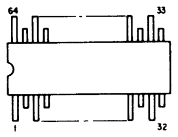

O
P
Q
R
S
T
U
V
W
X
Y
Z
A1
B1
C1
D1
TM-41 BOARD
IC001
μPD7519G
TIMER/REMOCON/COUNTOR MICRO COMPUTER IC
CN007 (WHT)
FAST
D006-D008
1SS119
SWITCH
SEG DATA b
SEG DATA f
SEG DATA g
PR LOCK
PR UP
PR RST
PR DWN
SEG DATA h
SEG DATA a
SEG DATA e
GND
EVENT
T12/S12
T15/S15
INT1
TR
T9/S9
P63
PWR SW
SSD
SCK
RT RQST
RT SD
REC REDY
AV CONT
AUDIO MUTE 3
VDD
RESET
VSS
P61
P62
X1
X2
VLOAD
FIP2
VPRE
FIP1
TIMER LED
KMI0
KMI1
KMI2
KMI3
KMO0
KMO1
KMO2
CTR/TIMER
TP001
TP002
CLOCK
Q005, Q006
2SC2785F
Q007
2SA1175F
INITIAL RESET
D009
1SS119
SWITCH
D001
1SS119
SWITCH
D002
RD9.1EB
BIAS
D005
TLR123
BIAS
X001
4.194304 MHz
no mark : REC mode
( ) : PB mode
* : Can not be measured
FILAMENT
FILAMENT
REC KEY
CTR RST
REC LED
GND
TIMER LED
TM-40 BOARD
no mark : REC mode
( ) : PB mode
* : Can not be measured
S204
PROGRAM
S208
DAY
S205
CLOCK SET SET/START
S209
HOUR
S101
TIMER COUNTER
S206
TIMER SET
S210
10MIN
S203
CLEAR
S207
TIMER REC
S211
MIN
S611
TONE
H → L
S612
INPUT SELECT
TUNER → LINE
TRACKING
RV611
100k
HI CUT a
HI CUT b
AUDIO SEL
VIDEO SEL
SW 12V (E)
SW 5V
TRACON
TO SERVO SYSTEM CONTROL BLOCK SS-16 BOARD CN309
FL101
PROG
TIMER REC
D102
RECORD
D103
RESET
S102
RECORD
S103
D102
TLR123
INDICATOR
D103
TLR123
INDICATOR
R101
330
COM
CH5
CH4
CH6
CH3
CH1
CH2
TO TUNER AUDIO BLOCK TU-39 BOARD CN003
S501
S502
S503
S504
S505
S506
S507
S508
S509
S510
S511
S512
CH11
CH10
CH12
CH9
CH7
CH8
TO TUNER AUDIO BLOCK TU-39 BOARD CN002

SEMICONDUCTORS

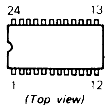
µPC1391H CX20016
CX7926 CX20061
CX20008



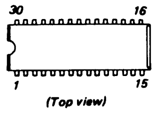
µPD7519



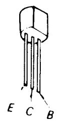
CX864
CX867
CX868


24
13
1
12
(Top view)

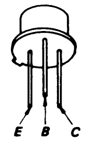
M54836


30
16
1
15
(Top view)

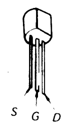
2SA844
2SC945



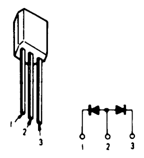
2SC1061
2SC1826
2SC1827



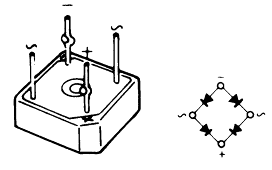
2SK107



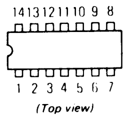
MC911



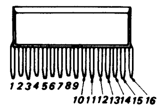
S5VB20



µPC324C MB84013B
µPD4013BC MB84069UBP
HD14069UBP TC4013BP
MB3614 TC4069UBP


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

BA7007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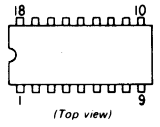
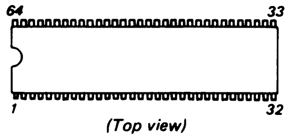
10 11 12 13 14 15 16

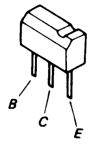
CX882


18
10
1
9
(Top view)

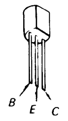
MB88421


64
33
1
32
(Top view)

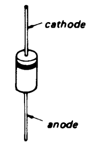
2SA874
2SA881
2SC2673



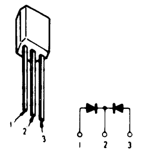
2SC2009



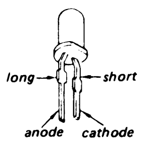
10E-1
10E-2
ERB12-02RK
GP08D


cathode
anode

MC921

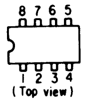


TLG123A
TLO123 TLR124
TLR123 TLY123

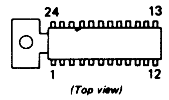

long
short
anode
cathode

1S1555 RD7.5EB2
1S2076 RD9.1E-B
1S2473 RD10EB1
1SS106 RD10EB2
1SS133 RD12EL1
RD5.6EB1 RD12EL2
RD6.2E-B RD12EL3
RD6.8EB2 RD12EB2
RD7.5EB1 RD12EB3

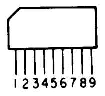
µPC358C
µPC4558C
NJM4558D


8 7 6 5
1 2 3 4
(Top view)

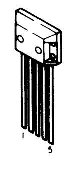
CX134A
CX135


24
13
1
12
(Top view)

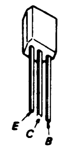
CX894
TA7320P



STR1229



2SA1048
2SA1115
2SC403SP
2SC2458
2SC2603



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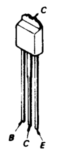
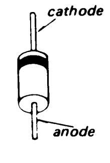
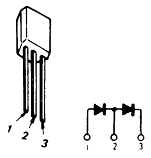



cathode
anode

MC931



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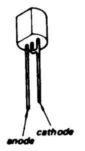
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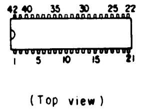
CX194B-0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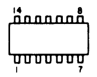
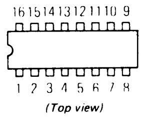
1 5 10 15 21
(Top view)

CX7945



TA7607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1 2 3 4 5 6 7 8
(Top view)

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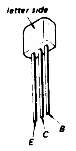
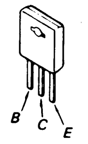

letter side
E C B

2SD1310



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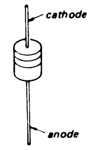
1SS148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anode

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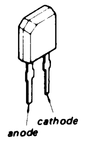
cathode
anode

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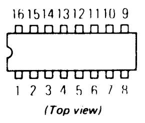
MB84053B
TC4053BP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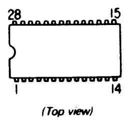
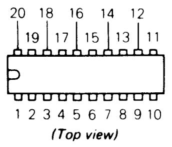
1 2 3 4 5 6 7 8
(Top view)

CX862
CX869


28
15
1
14
(Top view)

LA7046


20 18 16 14 12
19 17 15 13 11
1 2 3 4 5 6 7 8 9 10
(Top view)

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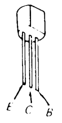
2SB739 2SD788
2SB740 2SD789
2SC1474



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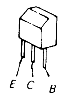

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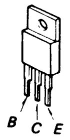
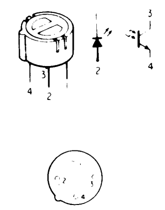
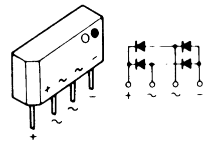


GP2S02A

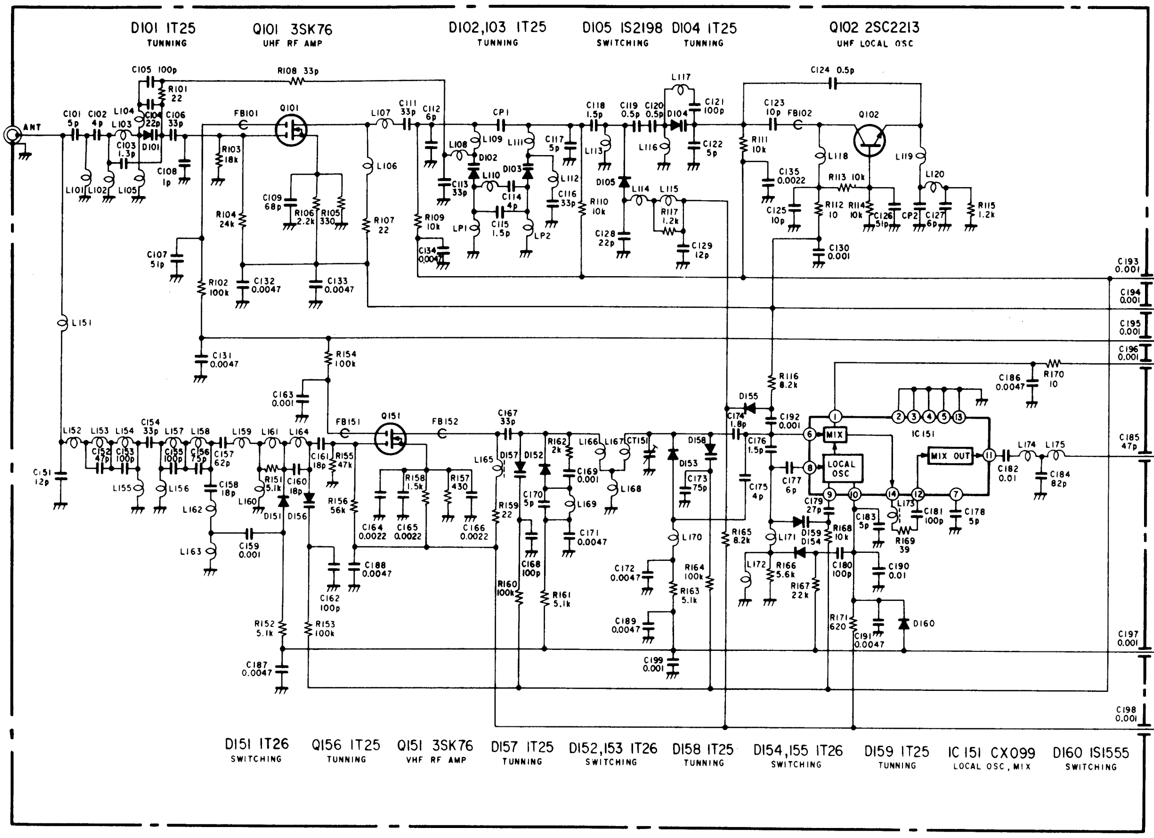


S1VB10



VHF/UHF TUNER SCHEMATIC DIAGRAM

- **BT-881**

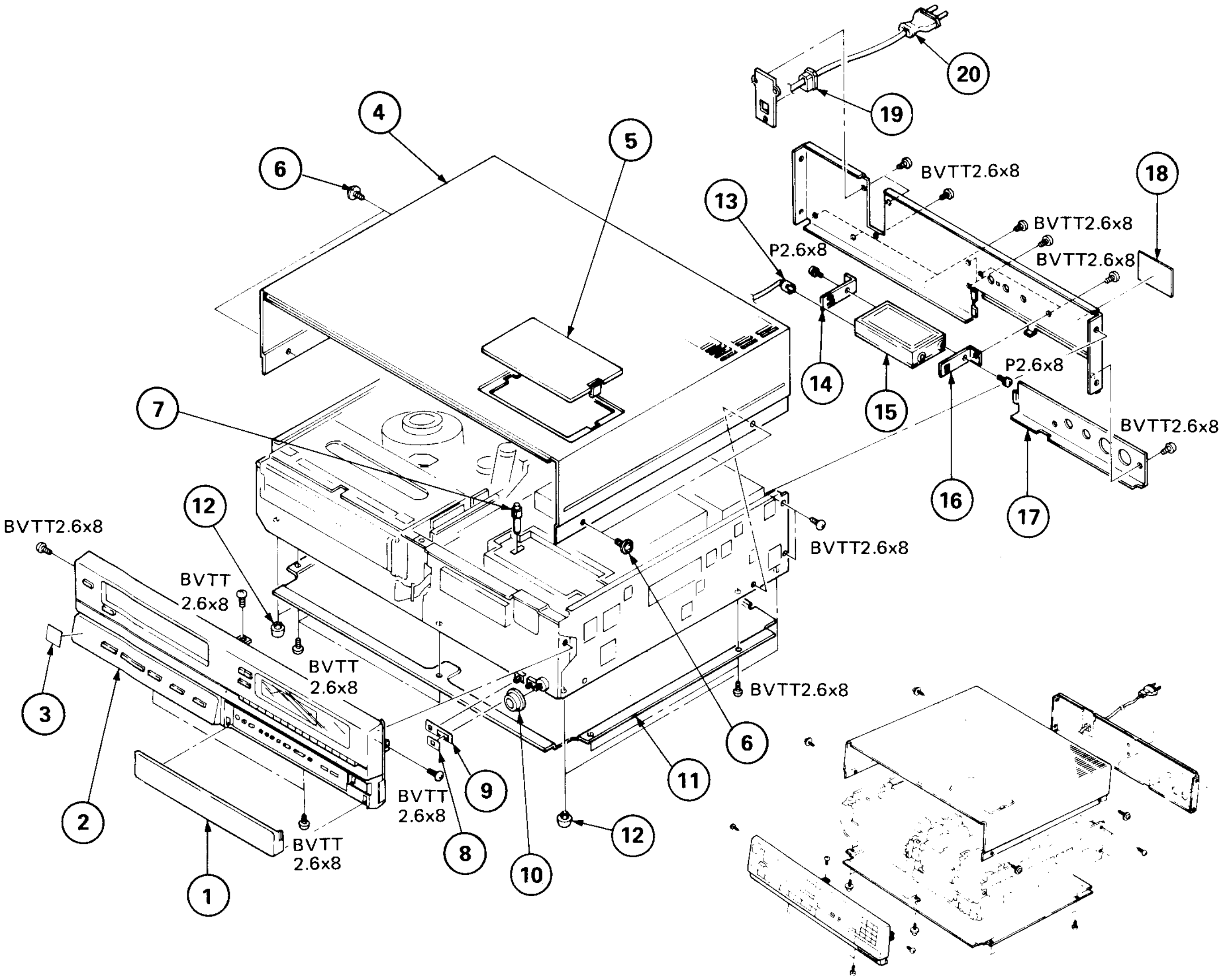

D101 1T25
TUNNING
Q101 3SK76
UHF RF AMP
D102,103 1T25
TUNNING
D105 1S2198
SWITCHING
D104 1T25
TUNNING
Q102 2SC2213
UHF LOCAL OSC
ANT
VC
U
AGC
B
IF
III
I
MIX
LOCAL OSC
MIX OUT
IC151
D151 1T26
SWITCHING
Q156 1T25
TUNNING
Q151 3SK76
VHF RF AMP
D157 1T25
TUNNING
D152,153 1T26
SWITCHING
D158 1T25
TUNNING
D154,155 1T26
SWITCHING
D159 1T25
TUNNING
IC 151 CX099
LOCAL OSC, MIX
D160 1S1555
SWITCHING

SECTION 4
EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

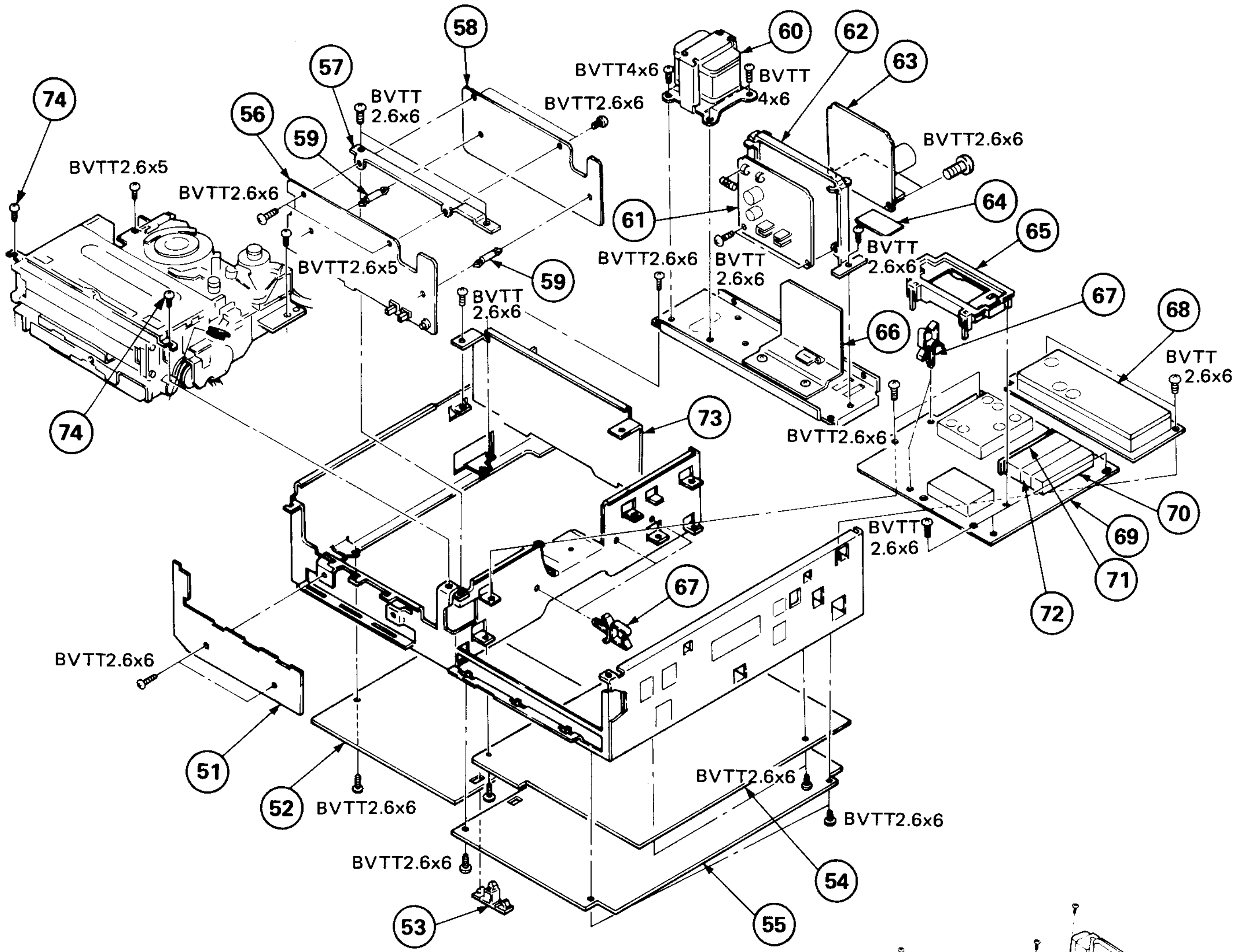
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

1. FRONT PANEL AND CABINET ASSEMBLIES



No.	Part No.	Description	Remark
1	X-3682-402-0	DOOR ASSY, FRONT	
2	A-6703-364-A	PANEL BLOCK ASSY, FRONT	
3	3-703-709-00	STICKER, SONY SYMBOL (15)	
4	X-3682-408-0	CASE ASSY, UPPER	
5	X-3682-405-0	DOOR ASSY, PRESET	
6	3-703-354-01	SCREW (OS), CASE, CLAW	
7	3-681-186-00	KNOB, TUNING	
8	♦:3-682-417-00	PLATE (B), BLIND, SWITCH	
9	♦:3-682-416-00	PLATE (A), BLIND, SWITCH	
10	3-682-414-00	KNOB, TRACK CONTROL	
11	3-681-152-00	PLATE, BOTTOM	
12	3-670-155-00	LEG	
13	♦:1-556-934-00	CABLE, PIN	
14	♦:3-681-102-00	BRACKET (LEFT), RBM	
15	⚠.1-464-270-11	BOOSTER, RF MODULATOR (RFU-808E)	
16	♦:3-681-101-00	BRACKET (RIGHT), RBM	
17	♦:3-681-114-00	PANEL, CONNECTOR	
18	♦:3-682-405-00	LABEL, MODEL NUMBER	
19	⚠.3-703-244-02	BUSHING, CORD	
20	⚠.1-534-817-12	POWER CORD	

2. TUNER, TIMER AND POWER ASSEMBLIES


58
57
BVTT 2.6x6
BVTT2.6x6
60
BVTT4x6
BVTT 4x6
62
63
74
56
59
BVTT2.6x5
BVTT2.6x6
BVTT2.6x6
61
64
65
BVTT 2.6x6
BVTT2.6x5
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BVTT2.6x6
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BVTT 2.6x6
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BVTT2.6x6
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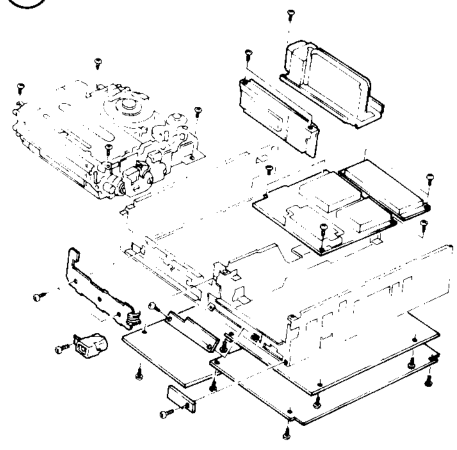
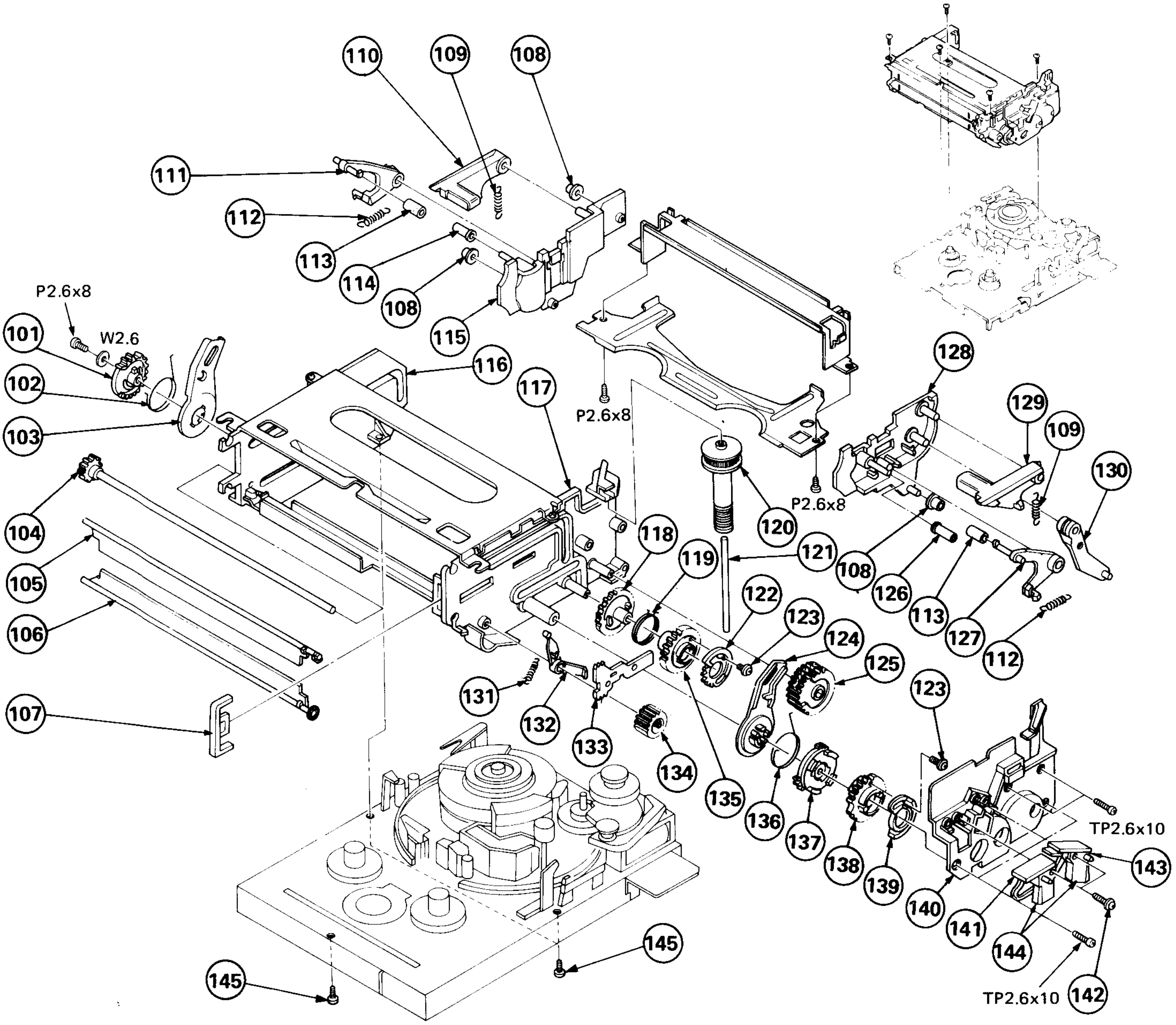
53
55



The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark
51	♠:1-610-806-00	FU-15 BOARD	
52	♠:A-6711-443-A	RY-1 BOARD, COMPLETE	
53	♠:3-681-184-00	HOLDER, PC BOARD	
54	♠:A-6715-187-A	SS-16 BOARD, COMPLETE	
55	♠:A-6711-450-A	YC-25 BOARD, COMPLETE	
56	♠:1-610-804-00	TM-40 BOARD	
57	♠:3-682-423-00	BRACKET	
58	♠:1-610-805-00	TM-41 BOARD	
59	♠:3-682-419-00	HOLDER, P.C.B	
60	⚠.1-447-614-11	TRANSFORMER, POWER	
61	♠:A-6728-831-A	PS-22 BOARD, COMPLETE	
62	♠:3-681-144-00	BRACKET, POWER PC BOARD	
63	♠:1-610-409-00	PS-23 BOARD	
64	3-681-112-00	SHEET, RADIATION	
65	3-681-146-00	COVER, PRESET	
66	3-681-116-00	HEAT SINK	
67	♠:3-655-214-00	CLIP, CABLE	
68	♠:A-6713-175-A	AM-3 BOARD, COMPLETE	
69	♠:A-6721-168-A	TU-39 BOARD, COMPLETE	
70	⚠.1-463-350-12	TUNER (BT-881)	
71	♠:1-610-400-00	MT-4 BOARD	
72	♠:3-662-383-00	BAND, RETAINER, TUNER	
73	♠:3-681-123-00	PLATE, SHIELD	
74	3-679-373-00	SCREW (+BV2.6x6)	

3. FRONT LOADING ASSEMBLY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115
P2.6x8
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W2.6
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103
116
117
P2.6x8
128
129
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120
P2.6x8
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135
136
137
138
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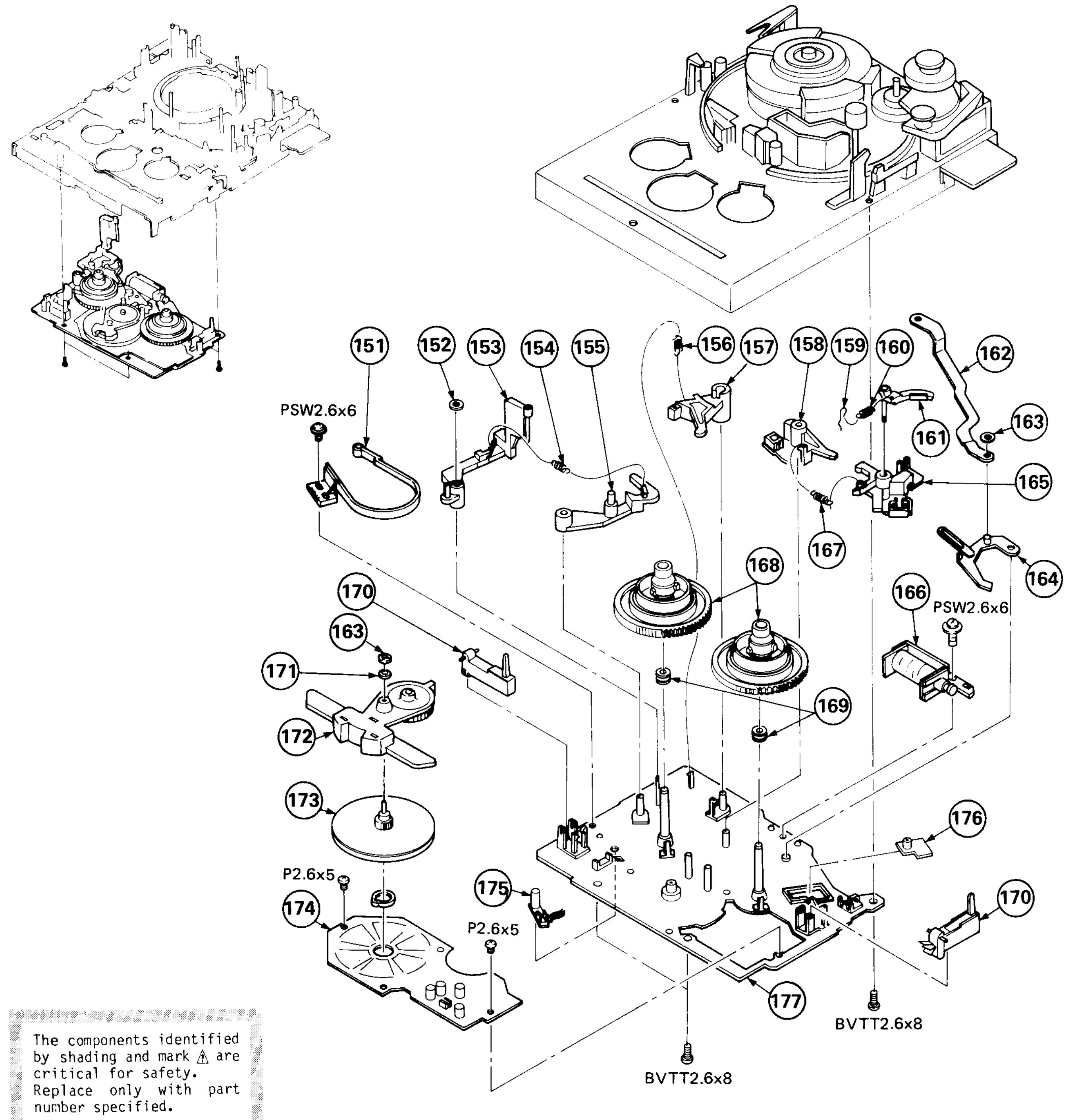
141
144
143
TP2.6x10
145
145
TP2.6x10
142

No.	Part No.	Description	Remark
101	3-679-226-00	GEAR (LEFT), ARM, DRIVING	
102	3-679-145-00	SPRING (LEFT)	
103	3-679-220-00	ARM (LEFT), DRIVING	
104	X-3679-105-0	SHAFT ASSY, GEAR, MIDWAY	
105	3-679-222-00	DOOR, UPPER	
106	3-679-223-00	DOOR, LOWER	
107	3-679-137-00	HOLDER, OUTER DOOR	
108	3-679-143-00	ROLLER	
109	3-679-188-00	SPRING, TENSION	
110	3-679-132-00	LEVER (LEFT), PREVENTION	
111	3-679-130-00	LEVER (LEFT), RETAINER, CASSETTE	
112	3-679-288-00	SPRING, TENSION	
113	3-679-135-00	RUBBER, RETAINER, CASSETTE	
114	3-679-128-00	ROLLER (RIGHT), DRIVING	
115	♠:X-3679-107-0	PLATE ASSY, SIDE, BASE LEFT	
116	♠:3-679-266-00	PLATE, SIDE, LEFT	
117	♠:3-679-265-00	PLATE, SIDE, RIGHT	
118	3-679-217-04	GEAR (A), LIMITER	
119	3-679-139-00	SPRING	
120	3-679-215-00	GEAR, WORM	
121	3-679-123-00	SHAFT, GEAR, WORM	
122	3-679-124-00	CAM (CASSETTE OFF)	
123	3-669-480-21	+ PTPWH 2	
124	3-679-219-00	ARM (RIGHT), DRIVING	
125	3-679-216-00	WHEEL, WORM	
126	3-679-316-00	ROLLER (LEFT), DRIVING	
127	3-679-129-00	LEVER(RIGHT), RETAINER, CASSETTE	
128	♠:X-3679-106-0	PLATE ASSY, SIDE, BASE RIGHT	
129	3-679-131-00	LEVER (RIGHT), PREVENTION	
130	3-679-133-00	ARM, LID OPEN	
131	3-679-189-00	SPRING, TENSION	
132	3-679-134-00	ARM, SWITCHING, DOOR	
133	3-679-221-00	PLATE, RACK, SWITCHING, DOOR	
134	3-679-126-00	GEAR (RIGHT), MIDWAY	
135	3-679-218-00	GEAR (B), LIMITER	
136	3-679-144-00	SPRING (RIGHT)	
137	3-679-225-00	GEAR (RIGHT), ARM, DRIVING	
138	3-679-125-00	GEAR, DRIVING	
139	3-679-138-00	CAM (CASSETTE ON)	
140	♠:3-679-214-00	HOLDER, GEAR, WORM	
141	♠:1-609-227-00	CS-3 BOARD	
142	3-669-480-00	+ PTPWH 2	
143	♠:1-609-228-00	CS-4 BOARD	
144	1-554-241-00	SWITCH, LEVER	
145	3-679-373-00	SCREW (+BV2.6x6)	

4. REEL TABLE ASSEMBLY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172
173
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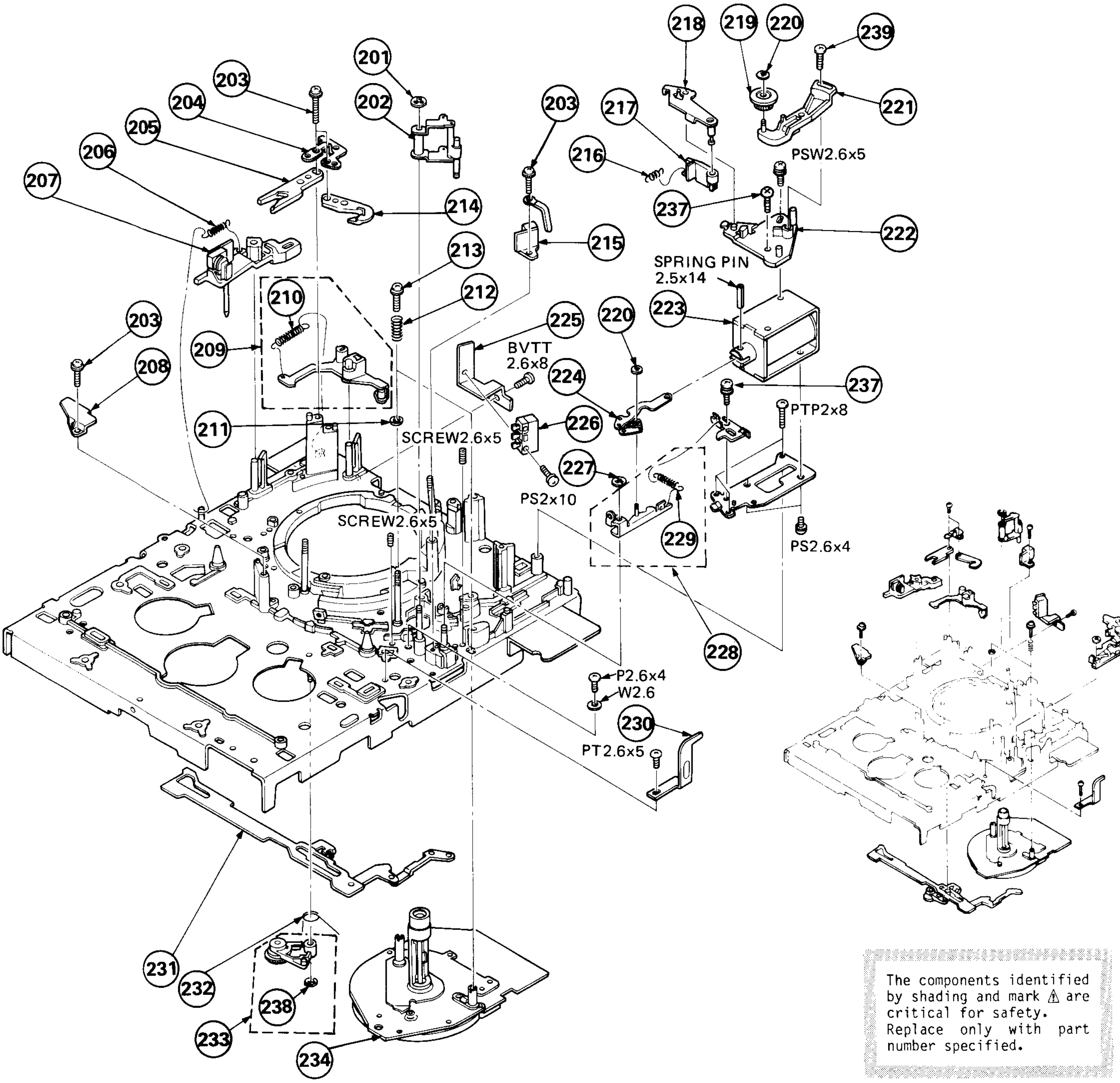
176
177
PSW2.6x6
P2.6x5
BVTT2.6x8

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark
151	X-3679-120-0	BAND ASSY, TENSION REGULATOR	
152	3-669-465-00	WASHER (1.5), STOPPER	
153	X-3679-122-0	LEVER ASSY, TENSION REGULATOR	
154	3-679-156-00	SPRING, TENSION	
155	♠:3-679-230-00	LEVER, FUNCTION	
156	3-679-151-00	SPRING, TENSION	
157	♠:3-679-231-00	LEVER, BRAKE, SOFT	
158	X-3679-117-0	BRAKE ASSY, S	
159	♠:3-681-163-00	HOOK, SPRING, REWIND	
160	3-681-156-00	SPRING, TENSION	
161	♠:X-3681-105-0	ARM ASSY, REWIND BRAKE	
162	♠:3-679-168-00	JOINT, BRAKE, L	
163	3-669-595-00	WASHER (2), STOPPER	
164	X-3679-119-0	ARM ASSY, STOPPER, PENDULUM	
165	X-3679-118-0	BRAKE ASSY, T	
166	⚠1-454-348-31	SOLENOID, BRAKE PLUNGER PM901	
167	3-679-190-00	SPRING, TENSION	
168	X-3681-104-0	TABLE ASSY, S REEL	
169	3-646-185-00	BEARING	
170	1-554-374-00	SWITCH, LEVER (CASSETTE IN)	
171	3-679-318-00	WASHER, PENDULUM ARM	
172	A-6759-074-H	ARM BLOCK ASSY, PENDULUM	
173	X-2622-201-0	ROTOR ASSY, R	
174	♠:A-4910-021-A	R STATOR BOARD, COMPLETE	
175	♠:1-610-401-00	RD-6 BOARD	
176	♠:1-610-402-00	RD-7 BOARD	
177	♠:X-3679-130-0	CHASSIS ASSY, SUB	

5. CHASSIS ASSEMBLY (1)



218
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PSW2.6x5
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215
213
SPRING PIN
2.5x14
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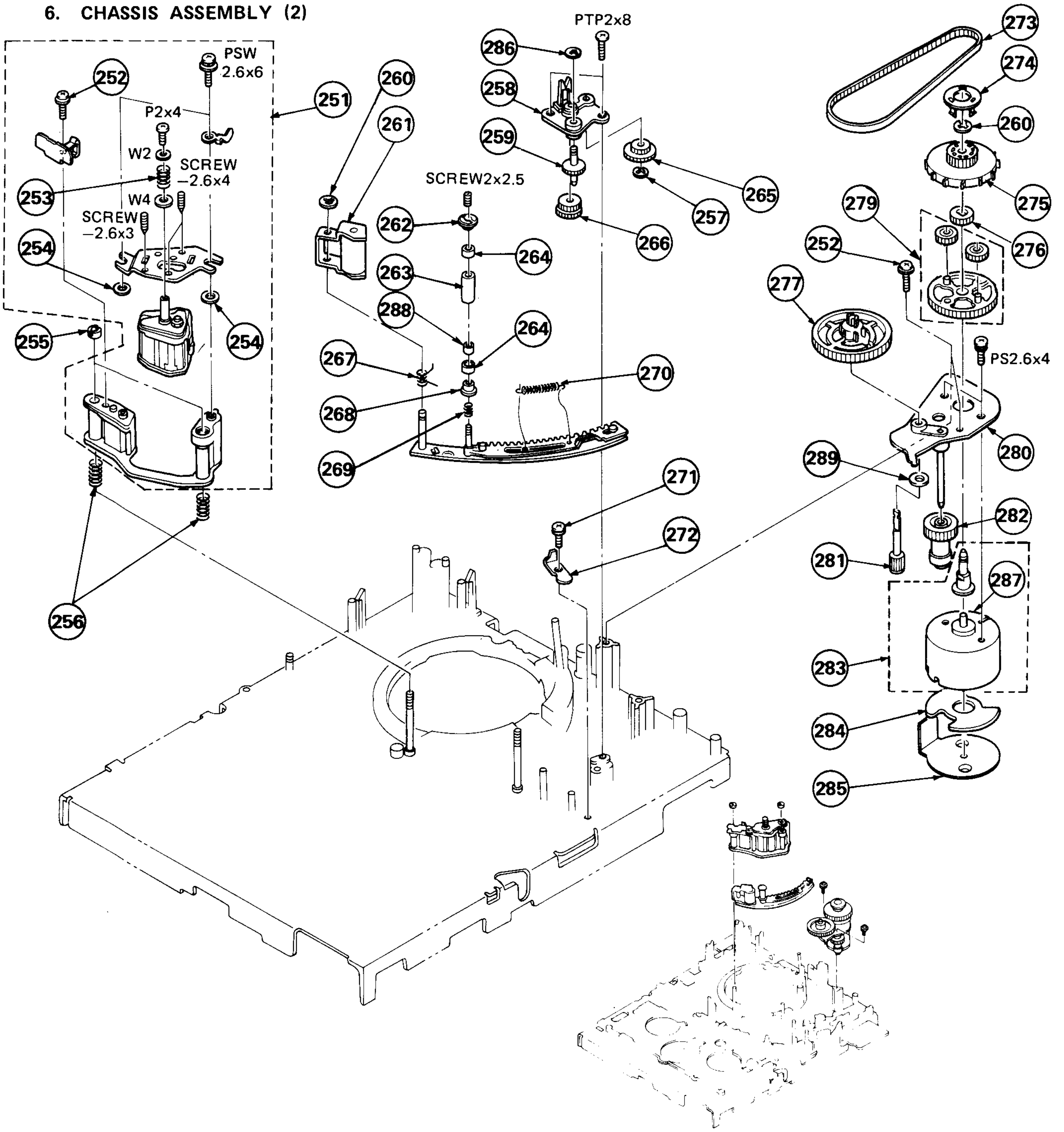
212
225
220
223
203
209
BVTT
2.6x8
208
224
237
PTP2x8
211
226
SCREW2.6x5
227
PS2x10
SCREW2.6x5
229
PS2.6x4
228
P2.6x4
W2.6
230
PT2.6x5
231
232
238
233
234

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark
201	3-669-596-00	WASHER (2.3), STOPPER	
202	•:X-3679-108-0	ARM ASSY, PRESS, PINCH	
203	3-669-480-11	+ PTPWH 2	
204	•:3-672-540-00	PLATE, GROUND, TAPE GUIDE	
205	•:3-669-618-00	PLATE (2), ADJUST	
206	3-679-164-00	SPRING, TENSION	
207	1-464-249-21	SENSOR, S COIL	
208	•:3-669-476-04	PLATE, GUIDE	
209	X-3679-149-0	ARM (B) ASSY, LOCK	210
210	3-679-323-00	SPRING, TENSION	
211	3-669-693-00	SPACER, CAPSTAN	
212	3-679-359-00	SPRING, COMPRESSION	
213	3-669-633-00	SCREW, + PW2	
214	•:3-672-507-00	PLATE (3-1), ADJUSTMENT	
215	1-464-250-00	SENSOR, T COIL	
216	3-508-108-XX	SPRING, TENSION	
217	•:3-679-251-00	LIMITER, STOPPER	
218	•:X-3679-123-0	ARM ASSY, STOPPER	
219	3-679-307-00	GEAR, TENSION	
220	3-669-465-00	WASHER (1.5), STOPPER	
221	•:X-3679-145-0	ARM ASSY, CAR, TENSION	
222	•:3-679-117-05	CHASSIS, ARM, STOPPER	
223	⚠ 1-454-349-21	SOLENOID, PLUNGER (PINCH) PM902	
224	X-3679-152-0	ARM (B) ASSY, PINCH SOLENOID	
225	•:3-672-542-00	BRACKET, SWITCH, LE	
226	1-553-539-00	SWITCH, MICRO (LOADING END)	
227	3-669-595-00	WASHER (2), STOPPER	
228	•:X-3669-379-0	ARM (P) ASSY, PINCH LIMITER	229
229	3-465-159-XX	SPRING, TENSION	
230	•:3-679-163-00	PLATE, LID OPEN	
231	X-3681-106-0	LEVER ASSY, SLIDE	
232	3-681-154-00	SPRING, TORSION	
233	X-3681-107-0	ARM ASSY, REVIEW BRAKE	
234	8-838-048-00	MOTOR, DC (BHF-1908A)	
237	3-669-607-31	+PSW (SMALL ROUND) (2.6)	
238	3-701-436-11	WASHER, 1.6	
239	3-672-522-01	SCREW, + PTPWH-2.3	

6. CHASSIS ASSEMBLY (2)



PSW 2.6x6
252
P2x4
251
W2
SCREW −2.6x4
253
W4
SCREW −2.6x3
254
255
254
256
260
261
SCREW2x2.5
262
264
263
288
264
267
268
269
270
286
PTP2x8
258
259
265
257
266
271
272
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252
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PS2.6x4
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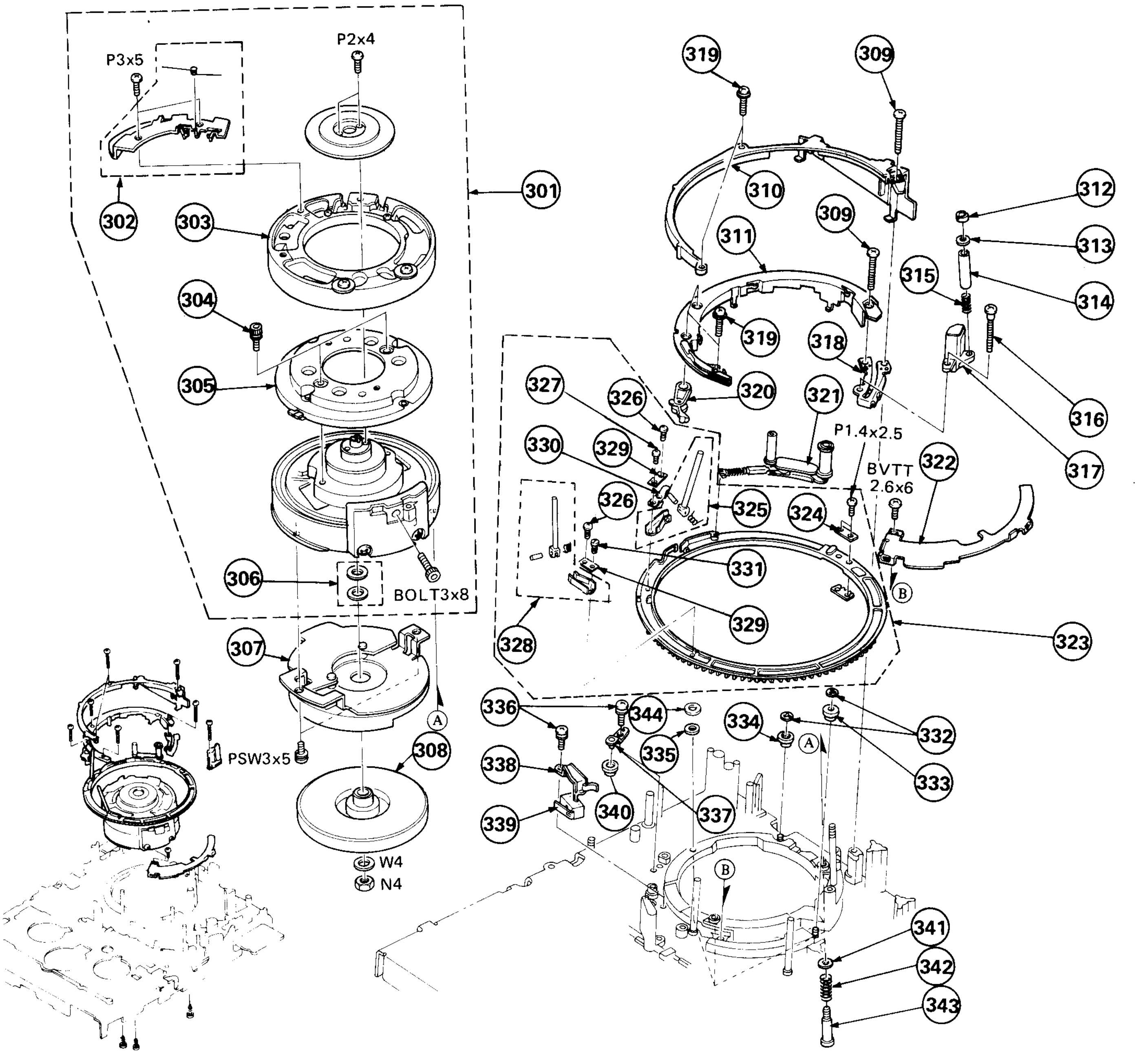
No.	Part No.	Description	Remark
251	A-6761-060-A	ACE ASSY	252,253,254
252	3-669-480-11	+PTPWH 2	
253	♠:3-669-316-00	SPRING, COMPRESSION	
254	3-669-598-00	WASHER, CTL	
255	3-669-318-00	NUT, ADJUSTMENT, GUIDE	
256	3-669-317-00	SPRING, COMPRESSION	
257	3-669-465-00	WASHER (1.5), STOPPER	
258	X-3679-147-0	CHASSIS (B) ASSY, DRIVE GEAR	
259	X-3679-148-0	GEAR (F) ASSY (B)	
260	3-669-596-00	WASHER (2.3), STOPPER	
261	X-3669-307-6	ARM ASSY, PINCH ROLLER	
262	3-669-431-00	FLANGE (UPPER), GUIDE	
263	3-669-438-00	ROLLER, GUIDE	
264	3-669-443-00	BEARING, BALL (NO FLANGE)	
265	3-669-337-00	GEAR (D)	
266	3-669-338-00	GEAR (E)	
267	3-669-444-00	SPRING, TORSION	
268	3-669-432-00	FLANGE (LOWER), GUIDE	
269	3-669-452-00	SPRING, COMPRESSION	
270	3-549-014-00	SPRING, TENSION	
271	3-669-667-31	+PSW (SMALL ROUND) 2.6	
272	♠:3-679-165-00	STOPPER, SLIDER	
273	3-679-119-00	BELT, SYNCHRO	
274	3-679-140-00	FLANGE, GEAR, INTERNAL	
275	3-679-101-00	GEAR, INTERNAL	
276	3-679-104-00	GEAR	
277	3-679-115-00	GEAR (LARGE), LOADING	
279	X-3679-111-0	CARRIER ASSY	
280	♠:X-3679-112-0	CHASSIS ASSY, GEAR, PLANET	
281	3-679-114-00	GEAR (SMALL), LOADING	
282	X-3669-321-0	GEAR (C) ASSY	
283	A-6737-118-A	MOTOR ASSY, L	287
284	♠:1-605-071-00	LM-8 BOARD	
285	♠:3-669-613-00	INSULATOR, L MOTOR	
286	3-669-595-00	WASHER (2), STOPPER	
287	1-541-163-00	MOTOR (LOADING MOTOR)	
288	3-657-841-31	SPACER (2X2.5)	
289	3-701-439-11	WASHER	

7. DRUM AND S LOADING ASSEMBLIES


P3x5
P2x4
301
302
303
304
305
306
BOLT3x8
307
PSW3x5
308
W4
N4
A
319
309
310
309
311
312
313
315
314
319
318
316
320
321
327
326
330
329
P1.4x2.5
BVTT
2.6x6
322
317
326
325
324
331
B
329
328
323
336
344
334
332
338
335
A
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B
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No.	Part No.	Description	Remark
301	A-6050-201-A	DRUM ASSY (DSH-40A-R)	302,303,304,305,306
302	A-6760-066-B	SPRING ASSY, TAPE RETAINER	
303	A-6760-138-A	DRUM ASSSY, UPPER	
304	3-669-157-00	BOLT (WASHER) (2.6X8)	
305	A-6762-136-A	DISK ASSY	
306	X-3669-105-0	SPACE BLOCK ASSY	
307	X-2621-204-0	STATOR ASSY, D	
308	X-2621-202-0	ROTOR ASSY, D	
309	3-669-466-00	SCREW (M 2.6)	
310	♠:3-669-585-00	GUIDE (2), SHUTTLE	
311	♠:3-679-290-00	GUIDE (1-YA), SHUTTLE	
312	3-669-446-00	NUT, GUIDE, NO. 6	
313	3-669-447-00	FLANGE, GUIDE, NO. 6	
314	3-669-445-00	SPACER, GUIDE, NO. 6	
315	3-669-615-00	SPRING, COMPRESSION	
316	3-669-606-00	SCREW (2.6)	
317	8-825-508-10	HEAD, FE	
318	♠:X-3669-313-0	BASE ASSY, SLANT	
319	3-669-480-11	+PTPWH 2	
320	X-3669-327-0	ARM ASSY, SWITCH, ULE	
321	A-6750-108-B	SHUTTLE BLOCK ASSY, THREADING	
322	♠:3-669-477-00	LINER, LINK, PIN	
323	X-3679-150-0	RING (YA) ASSY, S LOADING	324,325,326 327,328,329 330,331
324	♠:3-669-616-00	RETAINER	
325	♠:X-3669-430-0	HOLDER BLOCK ASSY, #3 GUIDE	
326	3-669-478-00	SCREW (1X3), TAPPING	
327	3-669-479-11	SCREW (1.4X3.5), TAPPING	
328	♠:X-3669-429-0	HOLDER BLOCK ASSY, #2 GUIDE	
329	♠:3-669-472-02	RETAINER, SPRING, LEAF	
330	3-672-583-00	SPRING	
331	3-672-586-00	SCREW (1.4X3), TAPPING	
332	3-669-465-00	WASHER (1.5), STOPPER	
333	3-669-597-00	ROLLER (B), RING	
334	3-669-630-00	ROLLER (C), RING	
335	♠:3-669-646-11	SPACER, DRUM	
336	3-669-667-31	+PSW (SMALL ROUND) 2.6	
337	♠:X-3669-329-0	PLATE ASSY, ADJUSTMENT	
338	♠:3-669-355-00	HOLDER, SWITCH, ULE	
339	1-553-718-00	SWITCH, MICRO (LOADING END)	
340	3-669-360-00	ROLLER, RING	
341	3-669-600-11	WASHER, FLAT (3.5)	
342	3-429-123-00	SPRING	
343	3-669-302-00	SCREW, FITTING	
344	♠:3-669-646-00	SPACER, DRUM	

8. HARDWARE LIST

SCREW

7-621-759-35	+PSW, 2.6X5
7-621-759-45	+PSW, 2.6X6
7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S
7-685-880-01	SCREW +BVTT 4X6 (S)
7-685-861-09	SCREW +BVTT 2.6X5 (S)
7-685-862-01	SCREW +BVTT 2.6X6 (S)
7-685-863-01	SCREW +BVTT 2.6X8 (S)
7-685-135-11	SCREW +P 2.6X10 TYPE2 NON-SLIT
7-621-259-32	SCREW +P 2.6X5
7-621-259-35	SCREW +P 2.6X5
7-685-134-11	SCREW +P 2.6X8 TYPE2 NON-SLIT
7-628-253-45	SCREW +PS 2X10
7-628-253-95	SCREW +PS 2.6X4
7-628-254-15	SCREW +PS 2.6X6
7-685-791-01	SCREW +PTT 2.6X5 (S)
7-627-551-08	SCREW, PRECISION +P 1.4X1.6
7-627-551-28	SCREW, PRECISION +P 1.4X2.5

SET-SCREW

7-621-712-26	SET-SCREW, SLOT 2.6X3FLAT POINT
7-621-712-35	SET-SCREW, SLOT 2.6X4CONE POINT
7-621-712-46	SET-SCREW, SLOT 2.6X5FLAT POINT
7-621-731-08	SET-SCT, HEX. 2X2.5, FLAT POINT

SPRING PIN

7-626-302-31	SPRING PIN, 2.5X14

NUT

7-622-205-05	N 2, TYPE 2

TAPPING PIN

7-685-105-11	TPG +P 2X8, TYPE 2, NON-SLIT

WASHER

7-688-002-11	W 2.6, MIDDLE
7-688-004-01	W 4, SMALL

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : μH

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description			Remark
	♠:A-4910-021-A	R STATOR BOARD, COMPLETE			(REEL MOTOR BOARD)
		************************			
	♠:1-560-460-00	PIN, CONNECTOR 4P			
		CAPACITOR			
C1	1-123-821-41	ELECT	47MF	20%	16V
C2	1-123-821-41	ELECT	47MF	20%	16V
C3	1-123-821-41	ELECT	47MF	20%	16V
C4	1-123-821-41	ELECT	47MF	20%	16V
		DIODE			
D1	8-719-941-48	DIODE 1N4148TP			
		IC			
IC1	8-759-108-77	IC CX-877			
		TRANSISTOR			
Q1	8-729-100-01	TRANSISTOR 2SD992			
Q2	8-729-100-01	TRANSISTOR 2SD992			
Q3	8-729-100-01	TRANSISTOR 2SD992			
Q4	8-729-100-01	TRANSISTOR 2SD992			
Q5	8-729-100-01	TRANSISTOR 2SD992			
Q6	8-729-100-01	TRANSISTOR 2SD992			
		RESISTOR			
R1	1-247-823-00	CARBON	470	5%	1/6W
R2	1-247-823-00	CARBON	470	5%	1/6W
R3	1-247-823-00	CARBON	470	5%	1/6W
R4	1-247-829-00	CARBON	820	5%	1/6W
R5	1-247-871-00	CARBON	47K	5%	1/6W
R6	1-247-871-00	CARBON	47K	5%	1/6W
R7	1-247-871-00	CARBON	47K	5%	1/6W
R8	1-247-871-00	CARBON	47K	5%	1/6W
		DIODE			
S1	8-719-810-31	DIODE THS103-1			
S2	8-719-810-31	DIODE THS103-1			
**					
	♠:A-6711-443-A	RY-1 BOARD, COMPLETE			
		********************			
	♠:3-681-177-00	CASE (MAIN), SHIELD, RY			
	♠:3-681-178-00	LID, UPPER, SHIELD CASE, RY			
	♠:3-681-179-00	LID, BOTTOM, SHIELD CASE, RY			
		CAPACITOR			
C001	1-161-021-00	CERAMIC	0.047MF	10%	25V
C002	1-123-330-00	ELECT	22MF	20%	16V
C003	1-161-021-00	CERAMIC	0.047MF	10%	25V
C004	1-161-021-00	CERAMIC	0.047MF	10%	25V
C005	1-161-021-00	CERAMIC	0.047MF	10%	25V
C006	1-123-305-00	ELECT	33MF	20%	10V
C007	1-123-380-00	ELECT	1MF	20%	50V
C008	1-123-380-00	ELECT	1MF	20%	50V
C009	1-101-004-00	CERAMIC	0.01MF		50V
C010	1-161-021-00	CERAMIC	0.047MF	10%	25V
C011	1-161-013-00	CERAMIC	0.01MF	10%	25V
C012	1-123-330-00	ELECT	22MF	20%	16V
C013	1-161-013-00	CERAMIC	0.01MF	10%	25V
C014	1-161-019-00	CERAMIC	0.033MF	10%	25V
C015	1-102-973-00	CERAMIC	100PF	5%	50V
C016	1-161-021-00	CERAMIC	0.047MF	10%	25V
C017	1-161-021-00	CERAMIC	0.047MF	10%	25V
C018	1-123-381-00	ELECT	2.2MF	20%	50V
C019	1-161-021-00	CERAMIC	0.047MF	10%	25V
C020	1-161-017-00	CERAMIC	0.022MF	10%	25V
C021	1-123-356-00	ELECT	10MF	20%	16V
C022	1-102-951-00	CERAMIC	15PF	5%	50V
C023	1-102-951-00	CERAMIC	15PF	5%	50V
C024	1-161-013-00	CERAMIC	0.01MF	10%	25V
C026	1-161-013-00	CERAMIC	0.01MF	10%	25V
C027	1-123-356-00	ELECT	10MF	20%	16V
C028	1-161-017-00	CERAMIC	0.022MF	10%	25V
C029	1-161-017-00	CERAMIC	0.022MF	10%	25V
C030	1-161-013-00	CERAMIC	0.01MF	10%	25V
C031	1-161-025-00	CERAMIC	0.1MF	10%	25V
C032	1-161-013-00	CERAMIC	0.01MF	10%	25V
C035	1-101-005-00	CERAMIC	0.022MF		50V
C036	1-123-318-00	ELECT	33MF	20%	16V
C037	1-102-851-00	CERAMIC	15PF	5%	50V
C038	1-161-025-00	CERAMIC	0.1MF	10%	25V
C039	1-102-981-00	CERAMIC	300PF	5%	50V
C040	1-102-981-00	CERAMIC	300PF	5%	50V
C041	1-102-976-00	CERAMIC	180PF	5%	50V
C044	1-102-515-00	CERAMIC	24PF	5%	50V
C045	1-161-025-00	CERAMIC	0.1MF	10%	25V
C046	1-161-021-00	CERAMIC	0.047MF	10%	25V
C047	1-161-021-00	CERAMIC	0.047MF	10%	25V
C048	1-101-005-00	CERAMIC	0.022MF		50V
C049	1-123-318-00	ELECT	33MF	20%	16V
C051	1-123-318-00	ELECT	33MF	20%	16V
C052	1-101-005-00	CERAMIC	0.022MF		50V
C053	1-101-005-00	CERAMIC	0.022MF		50V
C054	1-102-112-00	CERAMIC	330PF	10%	50V
C055	1-101-006-00	CERAMIC	0.047MF		50V
C056	1-102-112-00	CERAMIC	330PF	10%	50V
C057	1-102-948-00	CERAMIC	11PF	5%	50V
C058	1-102-112-00	CERAMIC	330PF	10%	50V
C059	1-123-328-00	ELECT	4.7MF	20%	25V
C060	1-102-119-00	CERAMIC	0.0015MF	10%	50V
C061	1-101-004-00	CERAMIC	0.01MF		50V
C062	1-123-318-00	ELECT	33MF	20%	16V
C063	1-101-006-00	CERAMIC	0.047MF		50V
C065	1-161-013-00	CERAMIC	0.01MF	10%	25V

RY-1

Ref.No.	Part No.	Description			Remark
C066	1-101-005-00	CERAMIC	0.022MF		50V
C067	1-161-013-00	CERAMIC	0.01MF	10%	25V
C068	1-161-013-00	CERAMIC	0.01MF	10%	25V
C069	1-161-013-00	CERAMIC	0.01MF	10%	25V
C070	1-123-356-00	ELECT	10MF	20%	16V
C071	1-101-004-00	CERAMIC	0.01MF		50V
C073	1-102-511-00	CERAMIC	13PF	5%	50V
C074	1-102-522-00	CERAMIC	51PF	5%	50V
C075	1-102-522-00	CERAMIC	51PF	5%	50V
C076	1-102-511-00	CERAMIC	13PF	5%	50V
C077	1-101-006-00	CERAMIC	0.047MF		50V
C078	1-123-356-00	ELECT	10MF	20%	16V
C079	1-123-307-00	ELECT	100MF	20%	10V
C080	1-123-380-00	ELECT	1MF	20%	50V
C083	1-123-296-00	ELECT	220MF	20%	6.3V
C084	1-123-296-00	ELECT	220MF	20%	6.3V
C085	1-102-511-00	CERAMIC	13PF	5%	50V
C086	1-102-522-00	CERAMIC	51PF	5%	50V
C087	1-102-522-00	CERAMIC	51PF	5%	50V
C088	1-102-511-00	CERAMIC	13PF	5%	50V
C092	1-102-529-00	CERAMIC	100PF	5%	50V
C093	1-123-332-00	ELECT	47MF	20%	16V
C094	1-101-004-00	CERAMIC	0.01MF		50V
C096	1-123-356-00	ELECT	10MF	20%	16V
C097	1-101-005-00	CERAMIC	0.022MF		50V
C098	1-123-318-00	ELECT	33MF	20%	16V
C099	1-123-328-00	ELECT	4.7MF	20%	25V
C100	1-102-519-00	CERAMIC	36PF	5%	50V
C101	1-102-529-00	CERAMIC	100PF	5%	50V
C103	1-102-508-00	CERAMIC	10PF	0.5PF	50V
C105	1-101-005-00	CERAMIC	0.022MF		50V
C106	1-123-328-00	ELECT	4.7MF	20%	25V
C107	1-102-976-00	CERAMIC	180PF	5%	50V
C108	1-102-823-00	CERAMIC	43PF	5%	50V
C109	1-102-821-00	CERAMIC	360PF	5%	50V
C111	1-102-851-00	CERAMIC	15PF	5%	50V
C113	1-101-059-00	CERAMIC	510PF	5%	50V
C115	1-123-328-00	ELECT	4.7MF	20%	25V
C117	1-101-006-00	CERAMIC	0.047MF		50V
C118	1-102-958-00	CERAMIC	20PF	5%	50V
C119	1-102-958-00	CERAMIC	20PF	5%	50V
C122	1-101-006-00	CERAMIC	0.047MF		50V
C123	1-102-513-00	CERAMIC	18PF	5%	50V
C124	1-102-958-00	CERAMIC	20PF	5%	50V
C125	1-102-958-00	CERAMIC	20PF	5%	50V
C126	1-102-114-00	CERAMIC	470PF	10%	50V

CONNECTOR

Ref.No.	Part No.	Description
CN001♠	:1-508-848-00	PIN, CONNECTOR 6P
CN002♠	:1-564-030-00	PIN, CONNECTOR 5P
CN003♠	:1-564-028-00	PIN, CONNECTOR 3P

DIODE

Ref.No.	Part No.	Description	Remark
D001	8-719-911-19	DIODE 1SS119	
D002	8-719-911-19	DIODE 1SS119	
D003	8-719-911-19	DIODE 1SS119	
D004	8-719-911-19	DIODE 1SS119	
D005	8-719-000-12	DIODE MC931	
D007	8-719-911-19	DIODE 1SS119	
D008	8-719-911-19	DIODE 1SS119	
D010	8-719-911-19	DIODE 1SS119	
D011	8-719-911-19	DIODE 1SS119	
D012	8-719-100-69	DIODE RD13EB3	

DELAY LINE

Ref.No.	Part No.	Description	Remark
DL001	1-415-312-00	DELAY LINE (1H)	

IC

Ref.No.	Part No.	Description	Remark
IC001	8-758-620-00	IC CX-862	
IC002	8-751-340-02	IC CX-134A	
IC003	8-759-608-64	IC CX-864	
IC004	8-751-350-00	IC CX-135	

COIL

Ref.No.	Part No.	Description	Remark
L001	1-408-429-00	MICRO INDUCTOR 470UH	
L002	1-408-878-00	MICRO INDUCTOR 0.33UH	
L003	1-408-878-00	MICRO INDUCTOR 0.33UH	
L004	1-408-421-00	MICRO INDUCTOR 100UH	
L005	1-408-425-00	MICRO INDUCTOR 220UH	
L006	1-408-425-00	MICRO INDUCTOR 220UH	
L007	1-407-502-00	MICRO INDUCTOR 6.8MMH	
L008	1-407-502-00	MICRO INDUCTOR 6.8MMH	
L009	1-408-414-00	MICRO INDUCTOR 27UH	
L010	1-408-414-00	MICRO INDUCTOR 27UH	
L012	1-407-717-00	MICRO INDUCTOR 1MMH	
L014	1-408-410-00	MICRO INDUCTOR 12UH	
L015	1-408-423-00	MICRO INDUCTOR 150UH	
L017	1-408-423-00	MICRO INDUCTOR 150UH	
L018	1-408-415-00	MICRO INDUCTOR 33UH	
L019	1-408-421-00	MICRO INDUCTOR 100UH	
L020	1-408-412-00	MICRO INDUCTOR 18UH	
L021	1-408-412-00	MICRO INDUCTOR 18UH	
L022	1-408-422-00	MICRO INDUCTOR 120UH	
L023	1-408-424-00	MICRO INDUCTOR 180UH	
L024	1-408-422-00	MICRO INDUCTOR 120UH	
L025	1-408-422-00	MICRO INDUCTOR 120UH	
L026	1-408-424-00	MICRO INDUCTOR 180UH	
L027	1-408-422-00	MICRO INDUCTOR 120UH	
L028	1-408-423-00	MICRO INDUCTOR 150UH	
L029	1-408-416-00	MICRO INDUCTOR 39UH	
L030	1-408-416-00	MICRO INDUCTOR 39UH	
L031	1-408-421-00	MICRO INDUCTOR 100UH	
L032	1-408-411-00	MICRO INDUCTOR 15UH	
L033	1-408-423-00	MICRO INDUCTOR 150UH	

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description	Remark
L034	1-408-417-00	MICRO INDUCTOR 47UH	
L035	1-408-416-00	MICRO INDUCTOR 39UH	
L036	1-407-170-XX	MICRO INDUCTOR 120UH	
		TRANSISTOR	
Q001	=>8-729-245-83	TRANSISTOR 2SC2458	
Q002	8-729-117-56	TRANSISTOR 2SA1175	
Q003	=>8-729-245-83	TRANSISTOR 2SC2458	
Q004	=>8-729-245-83	TRANSISTOR 2SC2458	
Q005	=>8-729-245-83	TRANSISTOR 2SC2458	
Q006	=>8-729-245-83	TRANSISTOR 2SC2458	
Q008	8-729-384-48	TRANSISTOR 2SA844	
Q009	8-729-603-30	TRANSISTOR 2SC403SP	
Q010	8-729-603-30	TRANSISTOR 2SC403SP	
Q011	8-729-384-48	TRANSISTOR 2SA844	
Q012	8-729-603-30	TRANSISTOR 2SC403SP	
Q013	8-729-603-30	TRANSISTOR 2SC403SP	
Q014	8-729-603-30	TRANSISTOR 2SC403SP	
Q015	8-729-384-48	TRANSISTOR 2SA844	
Q016	8-729-603-30	TRANSISTOR 2SC403SP	
Q017	8-729-384-48	TRANSISTOR 2SA844	
Q018	8-729-603-30	TRANSISTOR 2SC403SP	
Q019	8-729-603-30	TRANSISTOR 2SC403SP	
Q021	8-729-603-30	TRANSISTOR 2SC403SP	
Q022	8-729-603-30	TRANSISTOR 2SC403SP	
Q023	8-729-603-30	TRANSISTOR 2SC403SP	
Q024	8-729-603-30	TRANSISTOR 2SC403SP	
Q025	8-729-384-48	TRANSISTOR 2SA844	
Q028	8-729-384-48	TRANSISTOR 2SA844	
Q029	8-729-384-48	TRANSISTOR 2SA844	
Q033	8-729-384-48	TRANSISTOR 2SA844	
Q034	8-729-603-30	TRANSISTOR 2SC403SP	
Q035	8-729-603-30	TRANSISTOR 2SC403SP	
Q036	8-729-603-30	TRANSISTOR 2SC403SP	
Q037	8-729-603-30	TRANSISTOR 2SC403SP	
		RESISTOR	
R001	1-247-819-00	CARBON 330 5% 1/6W	
R002	1-247-783-00	CARBON 10 5% 1/6W	
R003	1-247-819-00	CARBON 330 5% 1/6W	
R004	1-247-783-00	CARBON 10 5% 1/6W	
R005	1-247-863-00	CARBON 22K 5% 1/6W	
R006	1-247-855-00	CARBON 10K 5% 1/6W	
R007	1-247-852-00	CARBON 7.5K 5% 1/6W	
R008	1-247-855-00	CARBON 10K 5% 1/6W	
R009	1-247-844-00	CARBON 3.6K 5% 1/6W	
R010	1-247-867-00	CARBON 33K 5% 1/6W	
R011	1-247-807-00	CARBON 100 5% 1/6W	
R012	1-247-855-00	CARBON 10K 5% 1/6W	
R013	1-247-855-00	CARBON 10K 5% 1/6W	
R014	1-247-831-00	CARBON 1K 5% 1/6W	
R015	1-247-827-00	CARBON 680 5% 1/6W	
R016	1-247-827-00	CARBON 680 5% 1/6W	
R017	1-247-835-00	CARBON 1.5K 5% 1/6W	
R018	1-247-835-00	CARBON 1.5K 5% 1/6W	
R019	1-247-844-00	CARBON 3.6K 5% 1/6W	
R020	1-247-844-00	CARBON 3.6K 5% 1/6W	
R021	1-247-831-00	CARBON 1K 5% 1/6W	
R022	1-247-867-00	CARBON 33K 5% 1/6W	
R023	1-247-871-00	CARBON 47K 5% 1/6W	
R024	1-247-847-00	CARBON 4.7K 5% 1/6W	
R025	1-247-847-00	CARBON 4.7K 5% 1/6W	
R026	1-247-855-00	CARBON 10K 5% 1/6W	
R027	1-247-847-00	CARBON 4.7K 5% 1/6W	
R028	1-247-855-00	CARBON 10K 5% 1/6W	
R029	1-247-824-00	CARBON 510 5% 1/6W	
R030	1-247-824-00	CARBON 510 5% 1/6W	
R031	1-247-779-00	CARBON 6.8 5% 1/6W	
R032	1-247-822-00	CARBON 430 5% 1/6W	
R033	1-247-815-00	CARBON 220 5% 1/6W	
R034	⚠.1-212-855-00	FUSIBLE 8.2 5% 1/4W	F
R035	1-247-839-00	CARBON 2.2K 5% 1/6W	
R036	1-247-839-00	CARBON 2.2K 5% 1/6W	
R037	1-247-831-00	CARBON 1K 5% 1/6W	
R038	1-247-831-00	CARBON 1K 5% 1/6W	
R039	1-247-839-00	CARBON 2.2K 5% 1/6W	
R040	1-247-839-00	CARBON 2.2K 5% 1/6W	
R041	1-247-833-00	CARBON 1.2K 5% 1/6W	
R042	⚠.1-212-855-00	FUSIBLE 8.2 5% 1/4W	F
R043	1-247-847-00	CARBON 4.7K 5% 1/6W	
R044	1-247-849-00	CARBON 5.6K 5% 1/6W	
R045	1-247-849-00	CARBON 5.6K 5% 1/6W	
R046	1-247-809-00	CARBON 120 5% 1/6W	
R047	1-247-844-00	CARBON 3.6K 5% 1/6W	
R048	1-247-839-00	CARBON 2.2K 5% 1/6W	
R049	1-247-814-00	CARBON 200 5% 1/6W	
R050	1-247-840-00	CARBON 2.4K 5% 1/6W	
R051	1-247-818-00	CARBON 300 5% 1/6W	
R052	1-247-834-00	CARBON 1.3K 5% 1/6W	
R053	1-247-830-00	CARBON 910 5% 1/6W	
R054	1-247-835-00	CARBON 1.5K 5% 1/6W	
R055	1-247-855-00	CARBON 10K 5% 1/6W	
R056	1-247-836-00	CARBON 1.6K 5% 1/6W	
R057	1-247-849-00	CARBON 5.6K 5% 1/6W	
R058	1-247-832-00	CARBON 1.1K 5% 1/6W	
R059	1-247-837-00	CARBON 1.8K 5% 1/6W	
R060	1-247-814-00	CARBON 200 5% 1/6W	
R061	1-247-839-00	CARBON 2.2K 5% 1/6W	
R062	1-247-810-00	CARBON 130 5% 1/6W	
R063	1-247-825-00	CARBON 560 5% 1/6W	
R064	1-247-839-00	CARBON 2.2K 5% 1/6W	
R065	1-247-842-00	CARBON 3K 5% 1/6W	
R066	1-247-821-00	CARBON 390 5% 1/6W	
R067	1-247-863-00	CARBON 22K 5% 1/6W	
R068	1-247-863-00	CARBON 22K 5% 1/6W	
R069	1-247-819-00	CARBON 330 5% 1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
R071	1-247-812-00	CARBON	160	5%	1/6W	
R072	1-247-831-00	CARBON	1K	5%	1/6W	
R073	1-247-855-00	CARBON	10K	5%	1/6W	
R074	1-247-832-00	CARBON	1.1K	5%	1/6W	
R075	1-247-832-00	CARBON	1.1K	5%	1/6W	
R077	1-247-859-00	CARBON	15K	5%	1/6W	
R078	1-247-855-00	CARBON	10K	5%	1/6W	
R079	1-247-842-00	CARBON	3K	5%	1/6W	
R080	1-247-867-00	CARBON	33K	5%	1/6W	
R081	1-247-824-00	CARBON	510	5%	1/6W	
R082	1-247-838-00	CARBON	2K	5%	1/6W	
R086	1-247-811-00	CARBON	150	5%	1/6W	
R087	1-247-866-00	CARBON	30K	5%	1/6W	
R088	1-247-844-00	CARBON	3.6K	5%	1/6W	
R089	1-247-847-00	CARBON	4.7K	5%	1/6W	
R090	1-247-831-00	CARBON	1K	5%	1/6W	
R091	1-247-883-00	CARBON	150K	5%	1/6W	
R092	1-247-867-00	CARBON	33K	5%	1/6W	
R095	1-247-869-00	CARBON	39K	5%	1/6W	
R096	1-247-807-00	CARBON	100	5%	1/6W	
R099	1-247-849-00	CARBON	5.6K	5%	1/6W	
R100	1-247-817-00	CARBON	270	5%	1/6W	
R101	1-247-817-00	CARBON	270	5%	1/6W	
R102	1-247-861-00	CARBON	18K	5%	1/6W	
R103	1-247-824-00	CARBON	510	5%	1/6W	
R104	1-247-883-00	CARBON	150K	5%	1/6W	
R105	1-247-838-00	CARBON	2K	5%	1/6W	
R106	1-247-835-00	CARBON	1.5K	5%	1/6W	
R108	1-247-837-00	CARBON	1.8K	5%	1/6W	
R109	1-247-837-00	CARBON	1.8K	5%	1/6W	
R110	1-247-849-00	CARBON	5.6K	5%	1/6W	
R111	1-247-879-00	CARBON	100K	5%	1/6W	
R112	1-247-827-00	CARBON	680	5%	1/6W	
R113	1-247-831-00	CARBON	1K	5%	1/6W	
R115	1-247-833-00	CARBON	1.2K	5%	1/6W	
R116	1-247-826-00	CARBON	620	5%	1/6W	
R117	1-247-826-00	CARBON	620	5%	1/6W	
R118	1-247-837-00	CARBON	1.8K	5%	1/6W	
R119	1-247-837-00	CARBON	1.8K	5%	1/6W	
R122	1-247-823-00	CARBON	470	5%	1/6W	
R123	1-247-824-00	CARBON	510	5%	1/6W	
R126	1-247-845-00	CARBON	3.9K	5%	1/6W	
R134	1-247-869-00	CARBON	39K	5%	1/6W	
R135	1-247-866-00	CARBON	30K	5%	1/6W	
R136	1-247-831-00	CARBON	1K	5%	1/6W	
R137	1-247-831-00	CARBON	1K	5%	1/6W	
R138	1-247-835-00	CARBON	1.5K	5%	1/6W	
R139	1-247-831-00	CARBON	1K	5%	1/6W	
R140	1-247-831-00	CARBON	1K	5%	1/6W	
R141	1-247-831-00	CARBON	1K	5%	1/6W	
R150	1-247-874-00	CARBON	62K	5%	1/6W	
R151	1-247-874-00	CARBON	62K	5%	1/6W	
R152	1-247-890-00	CARBON	300K	5%	1/6W	
R153	1-247-811-00	CARBON	150	5%	1/6W	
R154	1-247-834-00	CARBON	1.3K	5%	1/6W	
R155	1-247-837-00	CARBON	1.8K	5%	1/6W	
R156	1-247-817-00	CARBON	270	5%	1/6W	
R157	1-247-811-00	CARBON	150	5%	1/6W	
R158	1-247-829-00	CARBON	820	5%	1/6W	
R159	1-247-839-00	CARBON	2.2K	5%	1/6W	
R160	1-247-821-00	CARBON	390	5%	1/6W	
R162	1-247-831-00	CARBON	1K	5%	1/6W	
R163	1-247-863-00	CARBON	22K	5%	1/6W	
R164	1-247-863-00	CARBON	22K	5%	1/6W	
R165	1-247-834-00	CARBON	1.3K	5%	1/6W	
R166	1-247-807-00	CARBON	100	5%	1/6W	
R167	1-247-834-00	CARBON	1.3K	5%	1/6W	
R169	1-247-812-00	CARBON	160	5%	1/6W	
R170	1-247-819-00	CARBON	330	5%	1/6W	
R171	1-247-831-00	CARBON	1K	5%	1/6W	
R172	1-247-855-00	CARBON	10K	5%	1/6W	
R173	1-247-839-00	CARBON	2.2K	5%	1/6W	
R177	1-247-831-00	CARBON	1K	5%	1/6W	
R178	1-247-825-00	CARBON	560	5%	1/6W	
R179	1-247-857-00	CARBON	12K	5%	1/6W	

VARIABLE RESISTOR

RV001	1-226-847-00	RES, ADJ, CARBON 1K
RV002	1-226-848-00	RES, ADJ, CARBON 2.2K
RV003	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV004	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV005	1-228-746-00	RES, ADJ, CARBON 2.2K
RV006	1-228-753-00	RES, ADJ, CARBON 470K
RV007	1-228-745-00	RES, ADJ, CARBON 1K
RV008	1-226-851-00	RES, ADJ, CARBON 10K
RV009	1-228-750-00	RES, ADJ, CARBON 47K
RV010	1-228-750-00	RES, ADJ, CARBON 47K
RV011	1-228-994-00	RES, ADJ, METAL GLAZE 10K
RV012	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV013	1-228-745-00	RES, ADJ, CARBON 1K
RV014	1-226-850-00	RES, ADJ, CARBON 4.7K

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♦:A-6711-450-A YC-25 BOARD, COMPLETE
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1-536-796-00 TERMINAL BOARD, CONTROL PANEL

FILTER

BPF001 1-235-098-00 FILTER, BAND PASS

CAPACITOR

C001	1-102-953-00	CERAMIC	18PF	5%	50V
C002	1-101-004-00	CERAMIC	0.01MF		50V
C003	1-102-525-00	CERAMIC	68PF	5%	50V

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description			Remark
C004	1-102-525-00	CERAMIC	68PF	5%	50V
C005	1-102-110-00	CERAMIC	220PF	10%	50V
C006	1-101-004-00	CERAMIC	0.01MF		50V
C007	1-161-021-00	CERAMIC	0.047MF	10%	25V
C008	1-123-356-00	ELECT	10MF	20%	16V
C009	1-123-356-00	ELECT	10MF	20%	25V
C010	1-123-356-00	ELECT	10MF	20%	25V
C011	1-123-379-00	ELECT	0.47MF	20%	50V
C012	1-123-379-00	ELECT	0.47MF	20%	50V
C013	1-108-603-00	MYLAR	0.1MF	5%	50V
C014	1-123-354-00	ELECT	3.3MF	20%	50V
C015	1-101-004-00	CERAMIC	0.01MF		50V
C016	1-101-974-00	CERAMIC	20PF	5%	50V
C017	1-101-006-00	CERAMIC	0.047MF		50V
C018	1-101-006-00	CERAMIC	0.047MF		50V
C019	1-101-004-00	CERAMIC	0.01MF		50V
C021	1-101-003-00	CERAMIC	0.0047MF		50V
C022	1-123-380-00	ELECT	1MF	20%	50V
C023	1-101-004-00	CERAMIC	0.01MF		50V
C024	1-101-004-00	CERAMIC	0.01MF		50V
C025	1-101-004-00	CERAMIC	0.01MF		50V
C026	1-102-850-00	CERAMIC	56PF	5%	50V
C027	1-101-004-00	CERAMIC	0.01MF		50V
C028	1-101-004-00	CERAMIC	0.01MF		50V
C029	1-101-004-00	CERAMIC	0.01MF		50V
C030	1-102-850-00	CERAMIC	56PF	5%	50V
C031	1-101-004-00	CERAMIC	0.01MF		50V
C032	1-101-004-00	CERAMIC	0.01MF		50V
C033	1-101-005-00	CERAMIC	0.022MF		50V
C034	1-102-113-00	CERAMIC	390PF	10%	50V
C035	1-101-004-00	CERAMIC	0.01MF		50V
C036	1-161-021-00	CERAMIC	0.047MF	10%	25V
C037	1-123-318-00	ELECT	33MF	20%	16V
C038	1-101-004-00	CERAMIC	0.01MF		50V
C039	1-101-004-00	CERAMIC	0.01MF		50V
C040	1-101-004-00	CERAMIC	0.01MF		50V
C041	1-101-004-00	CERAMIC	0.01MF		50V
C043	1-102-508-00	CERAMIC	10PF	0.5PF	50V
C044	1-161-025-00	CERAMIC	0.1MF	10%	25V
C045	1-161-025-00	CERAMIC	0.1MF	10%	25V
C046	1-123-354-00	ELECT	3.3MF	20%	50V
C047	1-101-005-00	CERAMIC	0.022MF		50V
C048	1-101-004-00	CERAMIC	0.01MF		50V
C049	1-101-004-00	CERAMIC	0.01MF		50V
C050	1-101-004-00	CERAMIC	0.01MF		50V
C051	1-123-332-00	ELECT	47MF	20%	16V
C052	1-101-001-00	CERAMIC	0.001MF		50V
C053	1-101-006-00	CERAMIC	0.047MF		50V
C054	1-123-333-00	ELECT	100MF	20%	16V
C055	1-123-318-00	ELECT	33MF	20%	16V
C056	1-101-001-00	CERAMIC	0.001MF		50V
C057	1-131-341-00	ELECT(SOLID)	0.1MF	10%	25V
C058	1-101-005-00	CERAMIC	0.022MF		50V

Ref.No.	Part No.	Description			Remark
C059	1-123-356-00	ELECT	10MF	20%	16V
C060	1-123-330-00	ELECT	22MF	20%	16V
C061	1-102-512-00	CERAMIC	16PF	5%	50V
C062	1-101-005-00	CERAMIC	0.022MF		50V
C064	1-101-001-00	CERAMIC	0.001MF		50V
C065	1-101-004-00	CERAMIC	0.01MF		50V
C066	1-123-381-00	ELECT	2.2MF	20%	50V
C067	1-123-356-00	ELECT	10MF	20%	16V
C068	1-108-589-00	MYLAR	0.027MF	5%	50V
C069	1-123-306-00	ELECT	47MF	20%	10V
C070	1-101-006-00	CERAMIC	0.047MF		50V
C071	1-101-004-00	CERAMIC	0.01MF		50V
C072	1-101-005-00	CERAMIC	0.022MF		50V
C073	1-101-004-00	CERAMIC	0.01MF		50V
C074	1-101-004-00	CERAMIC	0.01MF		50V
C075	1-101-004-00	CERAMIC	0.01MF		50V
C076	1-101-004-00	CERAMIC	0.01MF		50V
C077	1-101-006-00	CERAMIC	0.047MF		50V
C078	1-123-318-00	ELECT	33MF	20%	16V
C079	1-101-004-00	CERAMIC	0.01MF		50V
C080	1-102-947-00	CERAMIC	10PF	5%	50V
C081	1-102-529-00	CERAMIC	100PF	5%	50V
C082	1-101-004-00	CERAMIC	0.01MF		50V
C083	1-101-004-00	CERAMIC	0.01MF		50V
C084	1-101-004-00	CERAMIC	0.01MF		50V
C085	1-101-004-00	CERAMIC	0.01MF		50V
C086	1-102-979-00	CERAMIC	240PF	5%	50V
C087	1-101-006-00	CERAMIC	0.047MF		50V
C088	1-101-006-00	CERAMIC	0.047MF		50V
C089	1-102-947-00	CERAMIC	10PF	5%	50V
C090	1-102-947-00	CERAMIC	10PF	5%	50V
C092	1-101-004-00	CERAMIC	0.01MF		50V
C093	1-101-004-00	CERAMIC	0.01MF		50V
C094	1-102-129-00	CERAMIC	0.01MF	10%	50V
C095	1-102-523-00	CERAMIC	56PF	5%	50V
C096	1-102-529-00	CERAMIC	100PF	5%	50V
C097	1-102-529-00	CERAMIC	100PF	5%	50V
C098	1-102-530-00	CERAMIC	120PF	5%	50V
C099	1-101-004-00	CERAMIC	0.01MF		50V
C100	1-101-006-00	CERAMIC	0.047MF		50V
C101	1-123-356-00	ELECT	10MF	20%	16V
C102	1-102-531-00	CERAMIC	150PF	5%	50V
C103	1-108-555-00	MYLAR	0.001MF	5%	50V
C104	1-108-555-00	MYLAR	0.001MF	5%	50V
C105	1-102-947-00	CERAMIC	10PF	5%	50V
C106	1-123-306-00	ELECT	47MF	20%	10V
C107	1-101-880-00	CERAMIC	47PF	5%	50V
C108	1-123-328-00	ELECT	4.7MF	20%	25V
C109	1-161-025-00	CERAMIC	0.1MF	10%	25V
C110	1-102-973-00	CERAMIC	100PF	5%	50V
C111	1-161-025-00	CERAMIC	0.1MF	10%	25V
C112	1-108-595-00	MYLAR	0.047MF	5%	50V
C113	1-101-059-00	CERAMIC	510PF	5%	50V

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description			Remark
C114	1-102-114-00	CERAMIC	470PF	10%	50V
C115	1-102-977-00	CERAMIC	200PF	5%	50V
C116	1-102-114-00	CERAMIC	470PF	10%	50V
C117	1-123-328-00	ELECT	4.7MF	20%	25V
C118	1-123-356-00	ELECT	10MF	20%	16V
C119	1-123-356-00	ELECT	10MF	20%	16V
C120	1-123-318-00	ELECT	33MF	20%	16V
C121	1-123-318-00	ELECT	33MF	20%	16V
C122	1-123-328-00	ELECT	4.7MF	20%	25V
C123	1-123-328-00	ELECT	4.7MF	20%	25V
C124	1-101-004-00	CERAMIC	0.01MF		50V
C125	1-101-006-00	CERAMIC	0.047MF		50V
C126	1-101-884-00	CERAMIC	56PF	5%	50V
C127	1-101-006-00	CERAMIC	0.047MF		50V
C128	1-101-006-00	CERAMIC	0.047MF		50V
C129	1-102-960-00	CERAMIC	24PF	5%	50V
C130	1-101-004-00	CERAMIC	0.01MF		50V
C131	1-101-006-00	CERAMIC	0.047MF		50V
C132	1-101-884-00	CERAMIC	56PF	5%	50V
C133	1-102-937-00	CERAMIC	4PF	0.25PF	50V
C134	1-101-004-00	CERAMIC	0.01MF		50V
C135	1-101-004-00	CERAMIC	0.01MF		50V
C136	1-123-380-00	ELECT	1MF	20%	50V
C137	1-108-569-00	MYLAR	0.0039MF	5%	50V
C138	1-123-356-00	ELECT	10MF	20%	16V
C139	1-123-332-00	ELECT	47MF	20%	16V
C140	1-101-006-00	CERAMIC	0.047MF		50V
C141	1-123-318-00	ELECT	33MF	20%	16V
C142	1-101-005-00	CERAMIC	0.022MF		50V
C143	1-123-333-00	ELECT	100MF	20%	16V
C144	1-101-004-00	CERAMIC	0.01MF		50V
C145	1-161-025-00	CERAMIC	0.1MF	10%	25V
C147	1-123-330-00	ELECT	22MF	20%	16V
C148	1-123-356-00	ELECT	10MF	20%	25V
C150	1-123-356-00	ELECT	10MF	20%	16V
C155	1-123-311-00	ELECT	1000MF	20%	10V
C157	1-123-356-00	ELECT	10MF	20%	16V
C159	1-123-356-00	ELECT	10MF	20%	16V
C161	1-123-356-00	ELECT	10MF	20%	16V
C162	1-161-021-00	CERAMIC	0.047MF	10%	25V
C163	1-101-004-00	CERAMIC	0.01MF		50V
C164	1-101-006-00	CERAMIC	0.047MF		50V
C167	1-101-006-00	CERAMIC	0.047MF		50V
C168	1-123-356-00	ELECT	10MF	20%	16V
C169	1-101-002-00	CERAMIC	0.0022MF		50V
C170	1-102-904-00	CERAMIC	110PF	5%	50V
C301	1-101-004-00	CERAMIC	0.01MF		50V
C302	1-102-811-61	CERAMIC	9PF	1PF	50V
C303	1-123-328-00	ELECT	4.7MF	20%	25V
C304	1-101-006-00	CERAMIC	0.047MF		50V
C305	1-161-021-00	CERAMIC	0.047MF	10%	25V
C306	1-101-006-00	CERAMIC	0.047MF		50V
C307	1-123-356-00	ELECT	10MF	20%	16V

Ref.No.	Part No.	Description			Remark
C308	1-161-021-00	CERAMIC	0.047MF	10%	25V
C309	1-161-021-00	CERAMIC	0.047MF	10%	25V
C310	1-161-021-00	CERAMIC	0.047MF	10%	25V
C311	1-161-021-00	CERAMIC	0.047MF	10%	25V
C314	1-102-978-00	CERAMIC	220PF	5%	50V
C315	1-101-004-00	CERAMIC	0.01MF		50V
C316	1-101-004-00	CERAMIC	0.01MF		50V
C317	1-102-520-00	CERAMIC	39PF	5%	50V
C318	1-101-006-00	CERAMIC	0.047MF		50V

FILTER

Ref.No.	Part No.	Description
CF001	1-527-874-00	FILTER, CERAMIC
CF002	1-527-875-00	FILTER, CERAMIC
CF003	1-527-998-00	FILTER, CERAMIC

CONNECTOR

Ref.No.	Part No.	Description
CN001	♠:1-564-032-00	PIN, CONNECTOR 7P
CN002	♠:1-564-033-00	PIN, CONNECTOR 8P
CN003	♠:1-560-891-00	PIN, CONNECTOR 3P
CN004	♠:1-560-895-00	PIN, CONNECTOR 7P
CN005	♠:1-560-893-00	PIN, CONNECTOR 5P
CN006	♠:1-560-892-00	PIN, CONNECTOR 4P
CN007	♠:1-560-894-00	PIN, CONNECTOR 6P
CN008	♠:1-560-895-00	PIN, CONNECTOR 7P
CN009	1-507-840-00	JACK, MINIATURE

TRIMMER

Ref.No.	Part No.	Description
CV001	1-141-275-00	CAP, TRIMMER

DIODE

Ref.No.	Part No.	Description
D001	=>8-719-911-19	DIODE 1SS119
D002	=>8-719-911-19	DIODE 1SS119
D004	8-719-100-34	DIODE RD5.6EB1
D005	8-719-000-12	DIODE MC931
D007	8-719-000-06	DIODE MC921
D009	8-719-000-06	DIODE MC921
D013	=>8-719-911-19	DIODE 1SS119
D016	=>8-719-911-19	DIODE 1SS119
D017	=>8-719-911-19	DIODE 1SS119
D018	=>8-719-911-19	DIODE 1SS119
D019	=>8-719-911-19	DIODE 1SS119
D020	=>8-719-911-19	DIODE 1SS119
D022	=>8-719-911-19	DIODE 1SS119
D028	8-719-100-56	DIODE RD10EB1
D031	=>8-719-911-19	DIODE 1SS119
D032	=>8-719-911-19	DIODE 1SS119
D035	=>8-719-911-19	DIODE 1SS119
D036	=>8-719-911-19	DIODE 1SS119
D037	=>8-719-911-19	DIODE 1SS119

DELAY LINE

Ref.No.	Part No.	Description
DL001	1-415-282-00	DELAY LINE (2H)
DL002	1-415-313-00	DELAY LINE (1H)

When indicating parts by reference number, please include the board name.

IC

Ref.No.	Part No.	Description	Remark
IC001	8-758-690-00	IC CX-869	
IC002	8-759-208-94	IC CX-894	
IC003	8-759-608-82	IC CX-882	
IC004	8-752-000-80	IC CX20008	
IC005	8-757-9[illegible]-00	IC CX-7945	
IC006	8-759-600-08	IC CX-870A	
IC007	8-759-904-95	IC BA7007	
IC008	8-759-208-94	IC CX-894	
IC009	8-759-208-94	IC CX-894	
IC010	8-759-273-20	IC TA7320P	
IC011	8-759-240-13	IC TC4013BP	
IC012	8-759-240-69	IC TC4069UBP	
IC013	8-759-208-67	IC CX-867	
IC014	8-759-908-68	IC CX-868	
IC015	=>8-750-000-74	IC CX20061	
IC016	8-759-979-26	IC CX-7926	

COIL

Ref.No.	Part No.	Description	Remark
L001	1-408-420-00	MICRO INDUCTOR 82UH	
	1-408-513-00	COIL (VARIABLE)	
L002	1-408-427-00	MICRO INDUCTOR 330UH	
L003	1-407-503-00	MICRO INDUCTOR 8.2MMH	
	1-408-513-00	COIL (VARIABLE)	
L004	1-408-408-00	MICRO INDUCTOR 8.2UH	
L005	1-408-429-00	MICRO INDUCTOR 470UH	
L006	1-407-503-00	MICRO INDUCTOR 8.2MMH	
L007	1-408-412-00	MICRO INDUCTOR 18UH	
L008	1-408-426-00	MICRO INDUCTOR 270UH	
L009	1-408-429-00	MICRO INDUCTOR 470UH	
L010	1-407-503-00	MICRO INDUCTOR 8.2MMH	
L011	1-408-408-00	MICRO INDUCTOR 8.2UH	
L012	1-408-406-00	MICRO INDUCTOR 5.6UH	
L013	1-407-496-00	MICRO INDUCTOR 2.2MMH	
L014	1-407-500-00	MICRO INDUCTOR 4.7MMH	
L015	1-407-163-XX	MICRO INDUCTOR 33UH	
L101	1-408-418-00	MICRO INDUCTOR 56UH	

FILTER

Ref.No.	Part No.	Description	Remark
LPF001	1-235-097-00	FILTER, LOW PASS	

VARIABLE COIL

Ref.No.	Part No.	Description	Remark
LV001	1-408-513-00	COIL (VARIABLE) 22UH	
LV002	1-408-512-00	COIL (VARIABLE) 10UH	
LV003	1-408-513-00	COIL (VARIABLE) 22UH	
LV004	1-407-291-00	MICRO INDUCTOR 15MMH	

IC LINK

Ref.No.	Part No.	Description	Remark
PS001⚠	**1-532-685-11**	LINK, IC P-N20	

TRANSISTOR

Ref.No.	Part No.	Description	Remark
Q001	=>8-729-245-83	TRANSISTOR 2SC2458	
Q002	=>8-729-245-83	TRANSISTOR 2SC2458	
Q003	=>8-729-245-83	TRANSISTOR 2SC2458	
Q004	=>8-729-245-83	TRANSISTOR 2SC2458	
Q006	8-729-603-50	TRANSISTOR 2SC403SP	
Q007	=>8-729-245-83	TRANSISTOR 2SC2458	
Q008	=>8-729-245-83	TRANSISTOR 2SC2458	
Q009	=>8-729-245-83	TRANSISTOR 2SC2458	
Q010	=>8-729-245-83	TRANSISTOR 2SC2458	
Q011	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q012	8-729-245-83	TRANSISTOR 2SC2458	
Q013	8-729-603-50	TRANSISTOR 2SC403SP	
Q014	8-729-603-50	TRANSISTOR 2SC403SP	
Q015	8-729-603-50	TRANSISTOR 2SC403SP	
Q016	=>8-729-245-83	TRANSISTOR 2SC2458	
Q017	=>8-729-245-83	TRANSISTOR 2SC2458	
Q018	=>8-729-245-83	TRANSISTOR 2SC2458	
Q019	=>8-729-245-83	TRANSISTOR 2SC2458	
Q020	=>8-729-245-83	TRANSISTOR 2SC2458	
Q021	=>8-729-245-83	TRANSISTOR 2SC2458	
Q022	=>8-729-245-83	TRANSISTOR 2SC2458	
Q023	=>8-729-245-83	TRANSISTOR 2SC2458	
Q024	=>8-729-245-83	TRANSISTOR 2SC2458	
Q025	=>8-729-245-83	TRANSISTOR 2SC2458	
Q026	=>8-729-245-83	TRANSISTOR 2SC2458	
Q027	=>8-729-245-83	TRANSISTOR 2SC2458	
Q028	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q029	=>8-729-245-83	TRANSISTOR 2SC2458	
Q030	=>8-729-245-83	TRANSISTOR 2SC2458	
Q031	=>8-729-245-83	TRANSISTOR 2SC2458	
Q032	=>8-729-245-83	TRANSISTOR 2SC2458	
Q033	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q034	=>8-729-245-83	TRANSISTOR 2SC2458	
Q035	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q036	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q037	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q038	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q039	=>8-729-245-83	TRANSISTOR 2SC2458	
Q040	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q041	=>8-729-245-83	TRANSISTOR 2SC2458	
Q042	=>8-729-245-83	TRANSISTOR 2SC2458	
Q043	=>8-729-245-83	TRANSISTOR 2SC2458	
Q044	=>8-729-245-83	TRANSISTOR 2SC2458	
Q045	=>8-729-245-83	TRANSISTOR 2SC2458	
Q046	=>8-729-245-83	TRANSISTOR 2SC2458	
Q047	=>8-729-245-83	TRANSISTOR 2SC2458	
Q048	=>8-729-245-83	TRANSISTOR 2SC2458	
Q049	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q050	=>8-729-245-83	TRANSISTOR 2SC2458	
Q051	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q052	=>8-729-245-83	TRANSISTOR 2SC2458	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

YC-25

Ref.No.	Part No.	Description	Remark
Q053	=>8-729-245-83	TRANSISTOR 2SC2458	
Q054	=>8-729-245-83	TRANSISTOR 2SC2458	
Q055	8-729-113-32	TRANSISTOR 2SB733	
Q056	8-729-113-32	TRANSISTOR 2SB733	
Q068	=>8-729-245-83	TRANSISTOR 2SC2458	
Q069	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q072	=>8-729-245-83	TRANSISTOR 2SC2458	
Q073	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

Ref.No.	Part No.	Description				Remark
R001	1-247-831-00	CARBON	1K	5%	1/6W	
R002	1-247-831-00	CARBON	1K	5%	1/6W	
R003	1-247-821-00	CARBON	390	5%	1/6W	
R004	1-247-835-00	CARBON	1.5K	5%	1/6W	
R005	1-247-855-00	CARBON	10K	5%	1/6W	
R006	1-247-867-00	CARBON	33K	5%	1/6W	
R007	1-247-855-00	CARBON	10K	5%	1/6W	
R008	1-247-831-00	CARBON	1K	5%	1/6W	
R009	1-247-831-00	CARBON	1K	5%	1/6W	
R010	1-247-870-00	CARBON	43K	5%	1/6W	
R011	1-247-865-00	CARBON	27K	5%	1/6W	
R012	1-247-875-00	CARBON	68K	5%	1/6W	
R013	1-247-867-00	CARBON	33K	5%	1/6W	
R014	1-247-867-00	CARBON	33K	5%	1/6W	
R015	1-247-867-00	CARBON	33K	5%	1/6W	
R016	1-247-867-00	CARBON	33K	5%	1/6W	
R018	1-247-873-00	CARBON	56K	5%	1/6W	
R019	1-247-873-00	CARBON	56K	5%	1/6W	
R020	1-247-847-00	CARBON	4.7K	5%	1/6W	
R021	1-247-831-00	CARBON	1K	5%	1/6W	
R022	1-247-873-00	CARBON	56K	5%	1/6W	
R023	1-247-863-00	CARBON	22K	5%	1/6W	
R024	1-247-873-00	CARBON	56K	5%	1/6W	
R025	1-247-871-00	CARBON	47K	5%	1/6W	
R026	1-247-871-00	CARBON	47K	5%	1/6W	
R027	1-247-869-00	CARBON	39K	5%	1/6W	
R028	1-247-871-00	CARBON	47K	5%	1/6W	
R029	1-247-852-00	CARBON	7.5K	5%	1/6W	
R030	1-247-842-00	CARBON	3K	5%	1/6W	
R031	1-247-849-00	CARBON	5.6K	5%	1/6W	
R032	1-247-817-00	CARBON	270	5%	1/6W	
R033	1-247-823-00	CARBON	470	5%	1/6W	
R034	1-247-797-00	CARBON	39	5%	1/6W	
R035	1-247-848-00	CARBON	5.1K	5%	1/6W	
R036	1-247-868-00	CARBON	36K	5%	1/6W	
R037	1-247-831-00	CARBON	1K	5%	1/6W	
R038	1-247-814-00	CARBON	200	5%	1/6W	
R039	1-247-855-00	CARBON	10K	5%	1/6W	
R040	1-247-862-00	CARBON	20K	5%	1/6W	
R041	1-247-824-00	CARBON	510	5%	1/6W	
R042	1-247-809-00	CARBON	120	5%	1/6W	
R043	1-247-770-00	CARBON	3	5%	1/6W	
R044	1-247-847-00	CARBON	4.7K	5%	1/6W	
R045	1-247-863-00	CARBON	22K	5%	1/6W	
R047	1-247-821-00	CARBON	390	5%	1/6W	
R048	1-247-839-00	CARBON	2.2K	5%	1/6W	
R049	1-247-821-00	CARBON	390	5%	1/6W	
R050	1-247-821-00	CARBON	390	5%	1/6W	
R051	1-247-821-00	CARBON	390	5%	1/6W	
R052	1-247-821-00	CARBON	390	5%	1/6W	
R053	1-247-821-00	CARBON	390	5%	1/6W	
R054	1-247-839-00	CARBON	2.2K	5%	1/6W	
R055	1-247-839-00	CARBON	2.2K	5%	1/6W	
R056	1-247-867-00	CARBON	33K	5%	1/6W	
R057	1-247-855-00	CARBON	10K	5%	1/6W	
R058	1-247-867-00	CARBON	33K	5%	1/6W	
R059	1-247-855-00	CARBON	10K	5%	1/6W	
R060	1-247-855-00	CARBON	10K	5%	1/6W	
R061	1-247-867-00	CARBON	33K	5%	1/6W	
R062	1-247-855-00	CARBON	10K	5%	1/6W	
R063	1-247-841-00	CARBON	2.7K	5%	1/6W	
R064	1-247-831-00	CARBON	1K	5%	1/6W	
R066	1-247-831-00	CARBON	1K	5%	1/6W	
R067	1-247-886-00	CARBON	200K	5%	1/6W	
R068	1-247-839-00	CARBON	2.2K	5%	1/6W	
R069	1-247-831-00	CARBON	1K	5%	1/6W	
R070	1-247-831-00	CARBON	1K	5%	1/6W	
R071	1-247-858-00	CARBON	13K	5%	1/6W	
R072	1-247-879-00	CARBON	100K	5%	1/6W	
R073	1-247-862-00	CARBON	20K	5%	1/6W	
R074	1-247-863-00	CARBON	22K	5%	1/6W	
R075	1-247-842-00	CARBON	3K	5%	1/6W	
R076	1-247-871-00	CARBON	47K	5%	1/6W	
R077	1-247-839-00	CARBON	2.2K	5%	1/6W	
R078	1-247-839-00	CARBON	2.2K	5%	1/6W	
R079	1-247-839-00	CARBON	2.2K	5%	1/6W	
R080	1-247-864-00	CARBON	24K	5%	1/6W	
R081	1-247-831-00	CARBON	1K	5%	1/6W	
R082	1-247-831-00	CARBON	1K	5%	1/6W	
R083	1-247-847-00	CARBON	4.7K	5%	1/6W	
R084	1-247-855-00	CARBON	10K	5%	1/6W	
R085	1-247-867-00	CARBON	33K	5%	1/6W	
R086	1-247-823-00	CARBON	470	5%	1/6W	
R087	1-247-838-00	CARBON	2K	5%	1/6W	
R088	1-247-875-00	CARBON	68K	5%	1/6W	
R089	1-247-867-00	CARBON	33K	5%	1/6W	
R090	1-247-831-00	CARBON	1K	5%	1/6W	
R091	1-247-879-00	CARBON	100K	5%	1/6W	
R092	1-247-846-00	CARBON	4.3K	5%	1/6W	
R093	1-247-835-00	CARBON	1.5K	5%	1/6W	
R094	1-247-855-00	CARBON	10K	5%	1/6W	
R095	1-247-853-00	CARBON	8.2K	5%	1/6W	
R096	1-247-855-00	CARBON	10K	5%	1/6W	
R097	1-247-855-00	CARBON	10K	5%	1/6W	
R098	1-247-867-00	CARBON	33K	5%	1/6W	
R099	1-247-831-00	CARBON	1K	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
R100	1-247-855-00	CARBON	10K	5%	1/6W	
R101	1-247-866-00	CARBON	30K	5%	1/6W	
R102	1-247-835-00	CARBON	1.5K	5%	1/6W	
R103	1-247-839-00	CARBON	2.2K	5%	1/6W	
R104	1-247-807-00	CARBON	100	5%	1/6W	
R105	1-247-855-00	CARBON	10K	5%	1/6W	
R106	1-247-831-00	CARBON	1K	5%	1/6W	
R107	1-247-821-00	CARBON	390	5%	1/6W	
R108	1-247-821-00	CARBON	390	5%	1/6W	
R109	1-247-831-00	CARBON	1K	5%	1/6W	
R110	1-247-835-00	CARBON	1.5K	5%	1/6W	
R111	1-247-831-00	CARBON	1K	5%	1/6W	
R112	1-247-855-00	CARBON	10K	5%	1/6W	
R113	1-247-863-00	CARBON	22K	5%	1/6W	
R114	1-247-855-00	CARBON	10K	5%	1/6W	
R115	1-247-863-00	CARBON	22K	5%	1/6W	
R116	1-247-867-00	CARBON	33K	5%	1/6W	
R117	1-247-867-00	CARBON	33K	5%	1/6W	
R118	1-247-867-00	CARBON	33K	5%	1/6W	
R119	1-247-843-00	CARBON	3.3K	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R121	1-247-855-00	CARBON	10K	5%	1/6W	
R122	1-247-867-00	CARBON	33K	5%	1/6W	
R123	1-247-831-00	CARBON	1K	5%	1/6W	
R124	1-247-825-00	CARBON	560	5%	1/6W	
R125	1-247-860-00	CARBON	16K	5%	1/6W	
R126	1-247-873-00	CARBON	56K	5%	1/6W	
R127	1-247-831-00	CARBON	1K	5%	1/6W	
R128	1-247-824-00	CARBON	510	5%	1/6W	
R129	1-247-838-00	CARBON	2K	5%	1/6W	
R130	1-247-838-00	CARBON	2K	5%	1/6W	
R131	1-247-855-00	CARBON	10K	5%	1/6W	
R132	1-247-855-00	CARBON	10K	5%	1/6W	
R133	1-247-843-00	CARBON	3.3K	5%	1/6W	
R134	1-247-855-00	CARBON	10K	5%	1/6W	
R135	1-247-843-00	CARBON	3.3K	5%	1/6W	
R136	1-247-855-00	CARBON	10K	5%	1/6W	
R137	1-247-855-00	CARBON	10K	5%	1/6W	
R138	1-247-855-00	CARBON	10K	5%	1/6W	
R139	1-247-823-00	CARBON	470	5%	1/6W	
R140	1-247-823-00	CARBON	470	5%	1/6W	
R141	1-247-859-00	CARBON	15K	5%	1/6W	
R142	1-247-864-00	CARBON	24K	5%	1/6W	
R143	1-247-831-00	CARBON	1K	5%	1/6W	
R144	1-247-826-00	CARBON	620	5%	1/6W	
R145	1-247-838-00	CARBON	2K	5%	1/6W	
R146	1-247-844-00	CARBON	3.6K	5%	1/6W	
R147	1-247-824-00	CARBON	510	5%	1/6W	
R148	1-247-824-00	CARBON	510	5%	1/6W	
R149	1-247-824-00	CARBON	510	5%	1/6W	
R150	1-247-824-00	CARBON	510	5%	1/6W	
R151	1-247-855-00	CARBON	10K	5%	1/6W	
R152	1-247-855-00	CARBON	10K	5%	1/6W	
R153	1-247-831-00	CARBON	1K	5%	1/6W	
R154	1-247-855-00	CARBON	10K	5%	1/6W	
R155	1-247-855-00	CARBON	10K	5%	1/6W	
R156	1-247-824-00	CARBON	510	5%	1/6W	
R157	1-247-824-00	CARBON	510	5%	1/6W	
R158	1-247-815-00	CARBON	220	5%	1/6W	
R159	1-247-848-00	CARBON	5.1K	5%	1/6W	
R160	1-247-871-00	CARBON	47K	5%	1/6W	
R161	1-247-855-00	CARBON	10K	5%	1/6W	
R162	1-247-841-00	CARBON	2.7K	5%	1/6W	
R163	1-247-850-00	CARBON	6.2K	5%	1/6W	
R164	1-247-848-00	CARBON	5.1K	5%	1/6W	
R165	1-247-841-00	CARBON	2.7K	5%	1/6W	
R166	1-247-875-00	CARBON	68K	5%	1/6W	
R167	1-247-859-00	CARBON	15K	5%	1/6W	
R168	1-247-831-00	CARBON	1K	5%	1/6W	
R169	1-247-839-00	CARBON	2.2K	5%	1/6W	
R170	1-247-882-00	CARBON	130K	5%	1/6W	
R171	1-247-879-00	CARBON	100K	5%	1/6W	
R172	1-247-895-00	CARBON	470K	5%	1/6W	
R173	1-247-857-00	CARBON	12K	5%	1/6W	
R174	1-247-838-00	CARBON	2K	5%	1/6W	
R175	1-247-869-00	CARBON	39K	5%	1/6W	
R176	1-247-878-00	CARBON	91K	5%	1/6W	
R177	1-247-847-00	CARBON	4.7K	5%	1/6W	
R178	1-247-859-00	CARBON	15K	5%	1/6W	
R179	1-247-855-00	CARBON	10K	5%	1/6W	
R180	1-247-879-00	CARBON	100K	5%	1/6W	
R181	1-247-875-00	CARBON	68K	5%	1/6W	
R182	1-247-855-00	CARBON	10K	5%	1/6W	
R183	1-247-867-00	CARBON	33K	5%	1/6W	
R184	1-247-828-00	CARBON	750	5%	1/6W	
R185	1-247-831-00	CARBON	1K	5%	1/6W	
R186	1-247-830-00	CARBON	910	5%	1/6W	
R187	1-247-853-00	CARBON	8.2K	5%	1/6W	
R188	1-247-855-00	CARBON	10K	5%	1/6W	
R189	1-247-858-00	CARBON	13K	5%	1/6W	
R190	1-247-875-00	CARBON	68K	5%	1/6W	
R191	1-247-882-00	CARBON	130K	5%	1/6W	
R192	1-247-887-00	CARBON	220K	5%	1/6W	
R193	1-247-831-00	CARBON	1K	5%	1/6W	
R194	1-247-831-00	CARBON	1K	5%	1/6W	
R195	1-247-830-00	CARBON	910	5%	1/6W	
R196	1-247-837-00	CARBON	1.8K	5%	1/6W	
R197	1-247-822-00	CARBON	430	5%	1/6W	
R198	1-247-855-00	CARBON	10K	5%	1/6W	
R199	1-247-838-00	CARBON	2K	5%	1/6W	
R200	1-247-873-00	CARBON	56K	5%	1/6W	
R201	1-247-873-00	CARBON	56K	5%	1/6W	
R202	1-247-879-00	CARBON	100K	5%	1/6W	
R203	1-247-879-00	CARBON	100K	5%	1/6W	
R204	1-247-855-00	CARBON	10K	5%	1/6W	
R205	1-247-871-00	CARBON	47K	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
R206	1-247-879-00	CARBON	100K	5%	1/6W	
R207	1-247-855-00	CARBON	10K	5%	1/6W	
R209	1-247-814-00	CARBON	200	5%	1/6W	
R210	1-247-808-00	CARBON	110	5%	1/6W	
R211	1-247-833-00	CARBON	1.2K	5%	1/6W	
R212	1-247-863-00	CARBON	22K	5%	1/6W	
R213	1-247-839-00	CARBON	2.2K	5%	1/6W	
R214	1-247-863-00	CARBON	22K	5%	1/6W	
R215	1-247-857-00	CARBON	12K	5%	1/6W	
R216	1-247-858-00	CARBON	13K	5%	1/6W	
R217	1-247-855-00	CARBON	10K	5%	1/6W	
R218	1-247-841-00	CARBON	2.7K	5%	1/6W	
R219	1-247-863-00	CARBON	22K	5%	1/6W	
R220	1-247-855-00	CARBON	10K	5%	1/6W	
R221	1-247-855-00	CARBON	10K	5%	1/6W	
R222	1-247-855-00	CARBON	10K	5%	1/6W	
R223	1-247-831-00	CARBON	1K	5%	1/6W	
R224	1-247-831-00	CARBON	1K	5%	1/6W	
R225	1-247-839-00	CARBON	2.2K	5%	1/6W	
R227	1-247-803-00	CARBON	68	5%	1/6W	
R236	1-247-871-00	CARBON	47K	5%	1/6W	
R240	1-247-804-00	CARBON	75	5%	1/6W	
R258	1-247-844-00	CARBON	3.6K	5%	1/6W	
R259	1-247-863-00	CARBON	22K	5%	1/6W	
R264	1-247-863-00	CARBON	22K	5%	1/6W	
R265	1-247-879-00	CARBON	100K	5%	1/6W	
R266	1-247-818-00	CARBON	300	5%	1/6W	
R267	1-247-838-00	CARBON	2K	5%	1/6W	
R270	1-247-839-00	CARBON	2.2K	5%	1/6W	
R271 ⚠	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R272	1-247-803-00	CARBON	68	5%	1/6W	
R273	1-247-875-00	CARBON	68K	5%	1/6W	
R274	1-247-831-00	CARBON	1K	5%	1/6W	
R276	1-247-871-00	CARBON	47K	5%	1/6W	
R278	1-247-855-00	CARBON	10K	5%	1/6W	
R279	1-247-804-00	CARBON	75	5%	1/6W	
R280	1-247-867-00	CARBON	33K	5%	1/6W	
R281	1-247-807-00	CARBON	100	5%	1/6W	
R282	1-247-847-00	CARBON	4.7K	5%	1/6W	
R304	1-247-831-00	CARBON	1K	5%	1/6W	
R311	1-247-843-00	CARBON	3.3K	5%	1/6W	
R312	1-247-846-00	CARBON	4.3K	5%	1/6W	
R315	1-247-855-00	CARBON	10K	5%	1/6W	
R316	1-247-900-00	CARBON	750K	5%	1/6W	
R317	1-247-855-00	CARBON	10K	5%	1/6W	
R320	1-247-867-00	CARBON	33K	5%	1/6W	

VARIABLE RESISTOR

Ref.No.	Part No.	Description	Remark
RV001	1-228-749-00	RES, ADJ, CARBON 22K	
RV002	1-228-746-00	RES, ADJ, CARBON 2.2K	
RV003	1-228-744-00	RES, ADJ, CARBON 470	
RV004	1-228-995-00	RES, ADJ, METAL GLAZE 22K	
RV005	1-228-748-00	RES, ADJ, CARBON 10K	
RV006	1-228-995-00	RES, ADJ, METAL GLAZE 22K	
RV007	1-228-989-00	RES, ADJ, METAL GLAZE 470	
RV008	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV009	1-228-750-00	RES, ADJ, CARBON 47K	
RV010	1-228-750-00	RES, ADJ, CARBON 47K	
RV011	1-228-750-00	RES, ADJ, CARBON 47K	
RV012	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K	
RV013	1-228-989-00	RES, ADJ, METAL GLAZE 470	

TRANSFORMER

Ref.No.	Part No.	Description
T001	1-426-093-00	COIL, REC C BPT

CRYSTAL

Ref.No.	Part No.	Description
X001	1-527-345-00	CRYSTAL, OSC 4.43MHZ

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Part No.	Description
♠:A-6713-175-A	AM-3 BOARD, COMPLETE
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♠:3-681-180-00	CASE (MAIN), SHIELD, AM
♠:3-681-182-00	LID, BOTTOM, SHIELD CASE, AM
♠:3-681-181-00	LID, UPPER, SHIELD CASE, AM

CAPACITOR

Ref.No.	Part No.	Description				Remark
C501	1-123-356-00	ELECT	10MF	20%	16V	
C503	1-123-356-00	ELECT	10MF	20%	16V	
C504	1-123-356-00	ELECT	10MF	20%	16V	
C505	1-123-330-00	ELECT	22MF	20%	16V	
C506	1-123-333-00	ELECT	100MF	20%	16V	
C507	1-123-333-00	ELECT	100MF	20%	16V	
C508	1-123-328-00	ELECT	4.7MF	20%	25V	
C509	1-123-328-00	ELECT	4.7MF	20%	25V	
C510	1-130-497-00	MYLAR	0.15MF	5%	50V	
C511	1-130-486-51	MYLAR	0.018MF	5%	50V	
C512	1-123-333-00	ELECT	100MF	20%	16V	
C513	1-123-379-00	ELECT	0.47MF	20%	50V	
C514	1-123-330-00	ELECT	22MF	20%	16V	
C515	1-102-111-00	CERAMIC	270PF	10%	50V	
C516	1-123-354-00	ELECT	3.3MF	20%	50V	
C517	1-130-507-51	MYLAR	0.0018MF	10%	50V	
C518	1-123-305-00	ELECT	33MF	20%	10V	
C519	1-130-516-51	MYLAR	0.01MF	10%	50V	
C520	1-123-354-00	ELECT	3.3MF	20%	50V	
C521	1-123-328-00	ELECT	4.7MF	20%	25V	
C522	1-123-333-00	ELECT	100MF	20%	16V	
C524	1-127-468-00	ELECT(SOLID)	0.22MF	5%	16V	
C525	1-130-502-00	MYLAR	680P	10%	50V	
C526	1-123-332-00	ELECT	47MF	20%	16V	
C527	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C528	1-130-477-00	MYLAR	0.0033MF	5%	50V	
C529	1-129-709-00	FILM	0.0039MF	10%	630V	
C530	1-102-108-00	CERAMIC	150PF	10%	50V	
C531	1-123-333-00	ELECT	100MF	20%	16V	
C532	1-123-356-00	ELECT	10MF	20%	16V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
C533	1-130-518-51	MYLAR	0.015MF	10%	50V	
C534	1-123-332-00	ELECT	47MF	20%	16V	
C535	1-102-111-00	CERAMIC	270PF	10%	50V	
C536	1-123-351-00	ELECT	0.47MF	20%	50V	

CONNECTOR

CN501♠	:1-560-894-00	PIN, CONNECTOR 6P
CN502♠	:1-560-895-00	PIN, CONNECTOR 7P
CN504♠	:1-564-030-00	PIN, CONNECTOR 5P
CN505♠	:1-560-890-00	PIN, CONNECTOR 2P

TRIMMER

CT501	1-141-215-00	CAP, TRIMMER

DIODE

D501	8-719-911-19	DIODE 1SS119
D503	8-719-911-06	DIODE 1SS106
D506	8-719-911-19	DIODE 1SS119
D507	=>8-719-200-02	DIODE 10E2
D508	8-719-812-31	DIODE TLR123

IC

IC501	8-759-800-46	IC LA7046
IC502	8-750-000-74	IC CX20061

COIL

L501	1-407-963-00	MICRO INDUCTOR 15MMH
L502	1-407-508-00	MICRO INDUCTOR 22MMH
	1-408-221-00	MICRO INDUCTOR 22MMH
L503	1-407-710-00	MICRO INDUCTOR 270UH
L504	1-407-508-00	MICRO INDUCTOR 22MMH
	1-408-221-00	MICRO INDUCTOR 22MMH

TRANSISTOR

Q501	8-729-988-12	TRANSISTOR 2SA881-R
Q502	8-729-178-54	TRANSISTOR 2SC2785-F
Q503	8-729-606-34	TRANSISTOR 2SC2603-G
Q504	8-729-967-32	TRANSISTOR 2SC2673-R
Q505	8-729-194-47	TRANSISTOR 2SC945-P
Q506	8-729-194-47	TRANSISTOR 2SC945-P
Q507	8-729-611-53	TRANSISTOR 2SA1115-F
Q508	8-729-178-54	TRANSISTOR 2SC2785-F
Q509	8-729-178-54	TRANSISTOR 2SC2785-F
Q510	8-729-606-34	TRANSISTOR 2SC2603-G
Q511	8-729-178-54	TRANSISTOR 2SC2785-F
Q512	8-729-178-54	TRANSISTOR 2SC2785-F

RESISTOR

Ref.No.	Part No.	Description				Remark
R501	1-247-879-00	CARBON	100K	5%	1/6W	
R502	1-247-864-00	CARBON	24K	5%	1/6W	
R503	1-247-875-00	CARBON	68K	5%	1/6W	
R504	1-247-875-00	CARBON	68K	5%	1/6W	
R505	1-247-875-00	CARBON	68K	5%	1/6W	
R506 ⚠.	1-247-660-00	CARBON	82	5%	1/4W	F
R507	1-247-847-00	CARBON	4.7K	5%	1/6W	
R508	1-247-867-00	CARBON	33K	5%	1/6W	
R509	1-247-847-00	CARBON	4.7K	5%	1/6W	
R510	1-247-855-00	CARBON	10K	5%	1/6W	
R511	1-247-839-00	CARBON	2.2K	5%	1/6W	
R512	1-247-791-00	CARBON	22	5%	1/6W	
R513	1-247-855-00	CARBON	10K	5%	1/6W	
R515	1-247-849-00	CARBON	5.6K	5%	1/6W	
R516	1-247-819-00	CARBON	330	5%	1/6W	
R517	1-210-825-00	SOLID	3.3M	5%	1/4W	
R518	1-247-851-00	CARBON	6.8K	5%	1/6W	
R519	1-247-859-00	CARBON	15K	5%	1/6W	
R520	1-247-819-00	CARBON	330	5%	1/6W	
R521	1-247-891-00	CARBON	330K	5%	1/6W	
R522	1-247-883-00	CARBON	150K	5%	1/6W	
R524	1-247-783-00	CARBON	10	5%	1/6W	
R525	1-247-843-00	CARBON	3.3K	5%	1/6W	
R526	1-247-863-00	CARBON	22K	5%	1/6W	
R527	1-247-879-00	CARBON	100K	5%	1/6W	
R528	1-247-853-00	CARBON	8.2K	5%	1/6W	
R529	1-247-855-00	CARBON	10K	5%	1/6W	
R530	1-247-849-00	CARBON	5.6K	5%	1/6W	
R531	1-247-829-00	CARBON	820	5%	1/6W	
R532	1-247-862-00	CARBON	20K	5%	1/6W	
R533 ⚠.	1-246-980-00	CARBON	3.3	5%	1/8W	F
R534	1-247-839-00	CARBON	2.2K	5%	1/6W	
R535	1-247-839-00	CARBON	2.2K	5%	1/6W	
R536	1-247-849-00	CARBON	5.6K	5%	1/6W	
R537	1-247-855-00	CARBON	10K	5%	1/6W	
R538	1-247-863-00	CARBON	22K	5%	1/6W	
R539	1-247-831-00	CARBON	1K	5%	1/6W	
R540	1-247-838-00	CARBON	2K	5%	1/6W	
R541	1-247-877-00	CARBON	82K	5%	1/6W	
R542	1-247-865-00	CARBON	27K	5%	1/6W	
R543	1-247-871-00	CARBON	47K	5%	1/6W	
R544	1-247-875-00	CARBON	68K	5%	1/6W	
R545	1-247-871-00	CARBON	47K	5%	1/6W	
R546	1-247-841-00	CARBON	2.7K	5%	1/6W	
R547	1-247-863-00	CARBON	22K	5%	1/6W	
R548	1-247-843-00	CARBON	3.3K	5%	1/6W	
R549	1-247-863-00	CARBON	22K	5%	1/6W	
R550	1-247-875-00	CARBON	68K	5%	1/6W	
R551	1-247-855-00	CARBON	10K	5%	1/6W	
R552	1-247-783-00	CARBON	10	5%	1/6W	

VARIABLE RESISTOR

RV501	1-228-748-00	RES, ADJ, CARBON 10K
RV502	1-228-744-00	RES, ADJ, CARBON 470
RV503	1-228-751-00	RES, ADJ, CARBON 100K

TRANSFORMER

T501	1-433-237-00	TRANSFORMER, OSCILLATOR

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

SS-16

Ref.No.	Part No.	Description	Remark
	♠:A-6715-187-A	SS-16 BOARD, COMPLETE **********************	
	♠:3-681-170-00	HEAT SINK, S	
	7-621-770-87	SCREW +B 2.6X5	

CAPACITOR

Ref.No.	Part No.	Description			Remark
C301	1-123-330-00	ELECT	22MF	20%	16V
C302	1-130-516-51	MYLAR	0.01MF	10%	50V
C303	1-130-516-51	MYLAR	0.01MF	10%	50V
C304	1-123-354-00	ELECT	3.3MF	20%	50V
C305	1-161-021-00	CERAMIC	0.047MF	10%	25V
C306	1-123-354-00	ELECT	3.3MF	20%	50V
C307	1-161-021-00	CERAMIC	0.047MF	10%	25V
C308	1-123-354-00	ELECT	3.3MF	20%	50V
C309	1-161-021-00	CERAMIC	0.047MF	10%	25V
C310	1-130-516-51	MYLAR	0.01MF	10%	50V
C311	1-123-296-00	ELECT	220MF	20%	6.3V
C312	1-123-328-00	ELECT	4.7MF	20%	25V
C313	1-161-013-00	CERAMIC	0.01MF	10%	25V
C314	1-123-306-00	ELECT	47MF	20%	10V
C315	1-108-605-00	MYLAR	0.12MF	5%	50V
C316	1-127-468-00	ELECT(SOLID)	0.22MF	5%	16V
C317	1-123-333-00	ELECT	100MF	20%	16V
C318	1-130-479-00	MYLAR	0.0047MF	5%	50V
C319	1-102-106-00	CERAMIC	100PF	10%	50V
C320	1-123-381-00	ELECT	2.2MF	20%	50V
C321	1-123-296-00	ELECT	220MF	20%	6.3V
C322	1-161-021-00	CERAMIC	0.047MF	10%	25V
C323	1-131-357-00	TANTALUM	4.7MF	20%	25V
C324	1-123-381-00	ELECT	2.2MF	20%	50V
C325	1-131-357-00	TANTALUM	4.7MF	20%	25V
C326	1-123-381-00	ELECT	2.2MF	20%	50V
C327	1-161-016-00	CERAMIC	0.018MF	10%	25V
C328	1-161-013-00	CERAMIC	0.01MF	10%	25V
C329	1-123-356-00	ELECT	10MF	20%	16V
C330	1-161-016-00	CERAMIC	0.018MF	10%	25V
C331	1-161-016-00	CERAMIC	0.018MF	10%	25V
C332	1-123-317-00	ELECT	22MF	20%	16V
C333	1-124-429-00	ELECT	0.68MF	20%	50V
C334	1-161-021-00	CERAMIC	0.047MF	10%	25V
C335	1-161-017-00	CERAMIC	0.022MF	10%	25V
C336	1-161-002-00	CERAMIC	0.0012MF	10%	25V
C337	1-161-016-00	CERAMIC	0.018MF	10%	25V
C338	1-161-013-00	CERAMIC	0.01MF	10%	25V
C339	1-161-016-00	CERAMIC	0.018MF	10%	25V
C340	1-161-013-00	CERAMIC	0.01MF	10%	25V
C341	1-123-354-00	ELECT	3.3MF	20%	50V
C342	1-161-019-00	CERAMIC	0.033MF	10%	25V
C343	1-123-330-00	ELECT	22MF	20%	16V
C344	1-161-019-00	CERAMIC	0.033MF	10%	25V
C345	1-161-013-00	CERAMIC	0.01MF	10%	25V
C346	1-161-021-00	CERAMIC	0.047MF	10%	25V
C347	1-123-380-00	ELECT	1MF	20%	50V
C348	1-127-472-00	ELECT(SOLID)	1MF	5%	16V
C350	1-123-333-00	ELECT	100MF	20%	16V
C351	1-123-306-00	ELECT	47MF	20%	10V
C352	1-161-021-00	CERAMIC	0.047MF	10%	25V
C355	1-123-328-00	ELECT	4.7MF	20%	25V
C356	1-123-380-00	ELECT	1MF	20%	50V
C357	1-123-333-00	ELECT	100MF	20%	16V
C358	1-161-021-00	CERAMIC	0.047MF	10%	25V
C360	1-123-333-00	ELECT	100MF	20%	16V
C361	1-123-333-00	ELECT	100MF	20%	16V
C362	1-161-021-00	CERAMIC	0.047MF	10%	25V
C363	1-123-332-00	ELECT	47MF	20%	16V
C365	1-123-354-00	TANTALUM	1.5MF	10%	25V
C601	1-161-021-00	CERAMIC	0.047MF	10%	25V
C602	1-161-013-00	CERAMIC	0.01MF	10%	25V
C603	1-129-794-00	FILM	0.0033MF	5%	100V
C604	1-161-013-00	CERAMIC	0.01MF	10%	25V
C605	1-161-013-00	CERAMIC	0.01MF	10%	25V
C606	1-123-380-00	ELECT	1MF	20%	50V
C607	1-123-380-00	ELECT	1MF	20%	50V
C608	1-161-494-00	CERAMIC	0.022MF	30%	25V
C609	1-161-013-00	CERAMIC	0.01MF	10%	25V
C610	1-161-002-00	CERAMIC	0.0012MF	10%	25V
C611	1-161-002-00	CERAMIC	0.0012MF	10%	25V
C612	1-102-517-00	CERAMIC	30PF	5%	50V
C613	1-102-517-00	CERAMIC	30PF	5%	50V
C614	1-123-331-00	ELECT	33MF	20%	25V
C615	1-123-331-00	ELECT	33MF	20%	25V
C617	1-123-380-00	ELECT	1MF	20%	50V
C618	1-123-306-00	ELECT	47MF	20%	10V
C801	1-161-017-00	CERAMIC	0.022MF	10%	25V
C851	1-123-305-00	ELECT	33MF		10V

FILTER

CF601	1-527-822-00	OSCILLATOR, CERAMIC

CONNECTOR

CN301	♠:1-560-892-00	PIN, CONNECTOR 4P
CN302	1-560-466-00	PIN, CONNECTOR 3P
CN303	♠:1-560-892-00	PIN, CONNECTOR 4P
CN304	♠:1-560-892-00	PIN, CONNECTOR 4P
CN305	♠:1-560-890-00	PIN, CONNECTOR 2P
CN306	♠:1-560-895-00	PIN, CONNECTOR 7P
CN307	♠:1-560-890-00	PIN, CONNECTOR 2P
CN308	♠:1-560-892-00	PIN, CONNECTOR 4P
CN309	♠:1-560-895-00	PIN, CONNECTOR 7P
CN310	♠:1-560-891-00	PIN, CONNECTOR 3P
CN311	♠:1-560-891-00	PIN, CONNECTOR 3P
CN312	♠:1-560-895-00	PIN, CONNECTOR 7P
CN602	♠:1-560-899-00	PIN, CONNECTOR 11P
CN603	♠:1-560-890-00	PIN, CONNECTOR 2P
CN604	♠:1-560-891-00	PIN, CONNECTOR 3P
CN605	♠:1-560-890-00	PIN, CONNECTOR 2P

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description	Remark
CN606	●:1-560-892-00	PIN, CONNECTOR 4P	
CN607	●:1-560-890-00	PIN, CONNECTOR 2P	
CN608	●:1-560-892-00	PIN, CONNECTOR 4P	
CN609	●:1-560-893-00	PIN, CONNECTOR 5P	
CN610	●:1-560-891-00	PIN, CONNECTOR 3P	
CN611	●:1-560-891-00	PIN, CONNECTOR 3P	
CN613	●:1-560-894-00	PIN, CONNECTOR 6P	
CN614	●:1-560-896-00	PIN, CONNECTOR 8P	
CN615	●:1-560-895-00	PIN, CONNECTOR 7P	

DIODE

Ref.No.	Part No.	Description	Remark
D301	8-719-100-57	DIODE RD10EB2	
D302	8-719-000-06	DIODE MC921	
D304	8-719-911-19	DIODE 1SS119	
D306	8-719-000-06	DIODE MC921	
D308	8-719-911-19	DIODE 1SS119	
D309	8-719-911-19	DIODE 1SS119	
D311	8-719-911-19	DIODE 1SS119	
D313	8-719-911-19	DIODE 1SS119	
D314	8-719-911-19	DIODE 1SS119	
D315	8-719-911-19	DIODE 1SS119	
D316	8-719-911-19	DIODE 1SS119	
D317	8-719-911-19	DIODE 1SS119	
D325	8-719-000-04	DIODE MC911	
D326	8-719-162-07	DIODE RD6.2E-B	
D327	8-719-200-02	DIODE 10E-2	
D328	8-719-000-06	DIODE MC921	
D335	8-719-911-19	DIODE 1SS119	
D339	8-719-911-19	DIODE 1SS119	
D340	8-719-911-19	DIODE 1SS119	
D341	8-719-812-31	DIODE TLR123	
D607	8-719-911-19	DIODE 1SS119	
D608	8-719-000-12	DIODE MC931	
D610	8-719-911-19	DIODE 1SS119	
D612	8-719-911-19	DIODE 1SS119	
D613	8-719-911-19	DIODE 1SS119	
D614	8-719-911-19	DIODE 1SS119	
D616	8-719-911-19	DIODE 1SS119	
D617	8-719-911-19	DIODE 1SS119	
D851	8-719-911-19	DIODE 1SS119	
D852	8-719-911-19	DIODE 1SS119	

IC

Ref.No.	Part No.	Description	Remark
IC301	8-751-941-00	IC CX-194B-0	
IC302	8-759-135-80	IC UPC358C	
IC303	8-759-145-58	IC UPC4558C	
IC304	8-759-132-40	IC UPC324C	
IC305	8-759-240-53	IC TC4053BP	
IC306	8-759-132-40	IC UPC324C	
IC307	8-759-240-53	IC TC4053BP	
IC308	8-759-135-80	IC UPC358C	
IC601	8-759-908-37	IC MB88421-113M	

COIL

Ref.No.	Part No.	Description	Remark
L601	1-408-418-00	MICRO INDUCTOR 56UH	

IC LINK

Ref.No.	Part No.	Description	Remark
PS301	⚠.1-532-637-11	LINK, IC	
PS302	⚠.1-532-679-11	LINK, IC	

TRANSISTOR

Ref.No.	Part No.	Description	Remark
Q301	=>8-729-245-83	TRANSISTOR 2SC2458	
Q302	=>8-729-245-83	TRANSISTOR 2SC2458	
Q303	=>8-729-245-83	TRANSISTOR 2SC2458	
Q304	=>8-729-245-83	TRANSISTOR 2SC2458	
Q305	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q306	=>8-729-245-83	TRANSISTOR 2SC2458	
Q307	=>8-729-245-83	TRANSISTOR 2SC2458	
Q309	=>8-729-245-83	TRANSISTOR 2SC2458	
Q310	=>8-729-245-83	TRANSISTOR 2SC2458	
Q311	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q312	=>8-729-177-43	TRANSISTOR 2SD774	
Q313	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q314	⚠.8-729-805-13	TRANSISTOR 2SC1475-13	
Q315	=>8-729-245-83	TRANSISTOR 2SC2458	
Q316	=>8-729-245-83	TRANSISTOR 2SC2458	
Q317	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q318	=>8-729-245-83	TRANSISTOR 2SC2458	
Q319	=>8-729-245-83	TRANSISTOR 2SC2458	
Q320	8-729-316-16	TRANSISTOR 2SC1061	
Q322	=>8-729-245-83	TRANSISTOR 2SC2458	
Q324	=>8-729-245-83	TRANSISTOR 2SC2458	
Q325	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q326	=>8-729-245-83	TRANSISTOR 2SC2458	
Q327	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q330	=>8-729-245-83	TRANSISTOR 2SC2458	
Q331	=>8-729-245-83	TRANSISTOR 2SC2458	
Q332	=>8-729-245-83	TRANSISTOR 2SC2458	
Q333	=>8-729-245-83	TRANSISTOR 2SC2458	
Q334	8-729-316-16	TRANSISTOR 2SC1061	
Q335	=>8-729-177-32	TRANSISTOR 2SD773	
Q336	=>8-729-245-83	TRANSISTOR 2SC2458	
Q337	=>8-729-245-83	TRANSISTOR 2SC2458	
Q338	=>8-729-245-83	TRANSISTOR 2SC2458	
Q339	=>8-729-245-83	TRANSISTOR 2SC2458	
Q340	8-729-374-02	TRANSISTOR 2SB740	
Q341	8-729-374-02	TRANSISTOR 2SB740	
Q342	=>8-729-177-43	TRANSISTOR 2SD774	
Q343	=>8-729-177-43	TRANSISTOR 2SD774	
Q344	=>8-729-245-83	TRANSISTOR 2SC2458	
Q345	=>8-729-177-43	TRANSISTOR 2SD774	
Q346	=>8-729-245-83	TRANSISTOR 2SC2458	
Q347	=>8-729-245-83	TRANSISTOR 2SC2458	
Q348	=>8-729-245-83	TRANSISTOR 2SC2458	
Q349	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q352	=>8-729-245-83	TRANSISTOR 2SC2458	
Q354	=>8-729-245-83	TRANSISTOR 2SC2458	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

SS-16

Ref.No.	Part No.	Description	Remark
Q355	=>8-729-245-83	TRANSISTOR 2SC2458	
Q356	=>8-729-245-83	TRANSISTOR 2SC2458	
Q357	=>8-729-245-83	TRANSISTOR 2SC2458	
Q358	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q359	=>8-729-245-83	TRANSISTOR 2SC2458	
Q360	=>8-729-245-83	TRANSISTOR 2SC2458	
Q362	=>8-729-245-83	TRANSISTOR 2SC2458	
Q363	=>8-729-245-83	TRANSISTOR 2SC2458	
Q364	=>8-729-245-83	TRANSISTOR 2SC2458	
Q365	=>8-729-245-83	TRANSISTOR 2SC2458	
Q366	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q367	=>8-729-245-83	TRANSISTOR 2SC2458	
Q368	=>8-729-245-83	TRANSISTOR 2SC2458	
Q370	=>8-729-245-83	TRANSISTOR 2SC2458	
Q371	=>8-729-245-83	TRANSISTOR 2SC2458	
Q372	=>8-729-245-83	TRANSISTOR 2SC2458	
Q373	=>8-729-245-83	TRANSISTOR 2SC2458	
Q604	=>8-729-245-83	TRANSISTOR 2SC2458	
Q605	=>8-729-245-83	TRANSISTOR 2SC2458	
Q606	=>8-729-245-83	TRANSISTOR 2SC2458	
Q607	=>8-729-245-83	TRANSISTOR 2SC2458	
Q608	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q609	=>8-729-245-83	TRANSISTOR 2SC2458	
Q610	=>8-729-245-83	TRANSISTOR 2SC2458	
Q611	=>8-729-245-83	TRANSISTOR 2SC2458	
Q612	=>8-729-245-83	TRANSISTOR 2SC2458	
Q613	=>8-729-245-83	TRANSISTOR 2SC2458	
Q614	=>8-729-245-83	TRANSISTOR 2SC2458	
Q615	=>8-729-177-43	TRANSISTOR 2SD774	
Q616	8-729-116-42	TRANSISTOR 2SD1164	
Q617	=>8-729-245-83	TRANSISTOR 2SC2458	
Q618	=>8-729-245-83	TRANSISTOR 2SC2458	
Q619	=>8-729-177-43	TRANSISTOR 2SD774	
Q620	8-729-116-42	TRANSISTOR 2SD1164	
Q621	=>8-729-245-83	TRANSISTOR 2SC2458	
Q622	=>8-729-245-83	TRANSISTOR 2SC2458	
Q623	=>8-729-245-83	TRANSISTOR 2SC2458	
Q624	=>8-729-245-83	TRANSISTOR 2SC2458	
Q625	=>8-729-245-83	TRANSISTOR 2SC2458	
Q626	8-729-987-42	TRANSISTOR 2SA874	
Q627	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q628	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q629	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q630	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q631	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q632	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q633	=>8-729-245-83	TRANSISTOR 2SC2458	
Q634	=>8-729-245-83	TRANSISTOR 2SC2458	
Q636	=>8-729-245-83	TRANSISTOR 2SC2458	
Q851	=>8-729-245-83	TRANSISTOR 2SC2458	
Q852	=>8-729-245-83	TRANSISTOR 2SC2458	
		RESISTOR	
R301	⚠1-212-855-00	FUSIBLE 8.2 5% 1/4W	F
R302	1-247-821-00	CARBON 390 5% 1/6W	
R303	1-206-482-00	METAL OXIDE 62 5% 2W	F

Ref.No.	Part No.	Description	Remark
R304	1-247-863-00	CARBON 22K 5% 1/6W	
R305	1-247-863-00	CARBON 22K 5% 1/6W	
R306	1-247-855-00	CARBON 10K 5% 1/6W	
R307	1-247-871-00	CARBON 47K 5% 1/6W	
R308	1-247-866-00	CARBON 30K 5% 1/6W	
R309	1-247-855-00	CARBON 10K 5% 1/6W	
R310	1-247-859-00	CARBON 15K 5% 1/6W	
R312	1-247-831-00	CARBON 1K 5% 1/6W	
R313	1-247-879-00	CARBON 100K 5% 1/6W	
R314	1-247-871-00	CARBON 47K 5% 1/6W	
R315	1-247-831-00	CARBON 1K 5% 1/6W	
R316	1-247-859-00	CARBON 15K 5% 1/6W	
R317	1-247-871-00	CARBON 47K 5% 1/6W	
R318	1-247-831-00	CARBON 1K 5% 1/6W	
R319	1-247-859-00	CARBON 15K 5% 1/6W	
R320	1-247-871-00	CARBON 47K 5% 1/6W	
R321	⚠1-212-850-00	FUSIBLE 5.1 5% 1/4W	F
R322	1-247-865-00	CARBON 27K 5% 1/6W	
R323	1-247-855-00	CARBON 10K 5% 1/6W	
R324	1-247-855-00	CARBON 10K 5% 1/6W	
R325	1-247-855-00	CARBON 10K 5% 1/6W	
R326	1-247-829-00	CARBON 820 5% 1/6W	
R327	1-247-839-00	CARBON 2.2K 5% 1/6W	
R328	1-247-835-00	CARBON 1.5K 5% 1/6W	
R329	1-247-863-00	CARBON 22K 5% 1/6W	
R331	1-247-849-00	CARBON 5.6K 5% 1/6W	
R332	1-247-819-00	CARBON 330 5% 1/6W	
R333	1-247-891-00	CARBON 330K 5% 1/6W	
R334	1-247-859-00	CARBON 15K 5% 1/6W	
R335	1-247-849-00	CARBON 5.6K 5% 1/6W	
R336	1-247-891-00	CARBON 330K 5% 1/6W	
R338	1-247-855-00	CARBON 10K 5% 1/6W	
R339	1-247-831-00	CARBON 1K 5% 1/6W	
R340	1-247-903-00	CARBON 1M 5% 1/6W	
R341	1-247-855-00	CARBON 10K 5% 1/6W	
R342	1-247-831-00	CARBON 1K 5% 1/6W	
R343	1-247-903-00	CARBON 1M 5% 1/6W	
R344	1-247-871-00	CARBON 47K 5% 1/6W	
R345	1-247-887-00	CARBON 220K 5% 1/6W	
R346	1-247-887-00	CARBON 220K 5% 1/6W	
R347	1-247-865-00	CARBON 27K 5% 1/6W	
R348	1-247-865-00	CARBON 27K 5% 1/6W	
R349	1-247-848-00	CARBON 5.1K 5% 1/6W	
R350	1-247-867-00	CARBON 33K 5% 1/6W	
R351	1-247-867-00	CARBON 33K 5% 1/6W	
R352	1-247-855-00	CARBON 10K 5% 1/6W	
R353	1-247-856-00	CARBON 11K 5% 1/6W	
R359	1-247-871-00	CARBON 47K 5% 1/6W	
R360	1-247-871-00	CARBON 47K 5% 1/6W	
R361	1-247-859-00	CARBON 15K 5% 1/6W	
R362	1-247-872-00	CARBON 51K 5% 1/6W	
R363	1-247-847-00	CARBON 4.7K 5% 1/6W	
R364	1-247-900-00	CARBON 750K 5% 1/6W	

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When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
R365	1-247-847-00	CARBON	4.7K	5%	1/6W	
R367	1-247-871-00	CARBON	47K	5%	1/6W	
R368	1-247-833-00	CARBON	1.2K	5%	1/6W	
R369	1-247-838-00	CARBON	2K	5%	1/6W	
R370	1-247-847-00	CARBON	4.7K	5%	1/6W	
R371	⚠.1-212-360-00	METAL OXIDE	1	5%	1W	F
R372	⚠.1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R373	1-247-883-00	CARBON	150K	5%	1/6W	
R374	1-247-883-00	CARBON	150K	5%	1/6W	
R375	1-247-847-00	CARBON	4.7K	5%	1/6W	
R376	1-247-857-00	CARBON	12K	5%	1/6W	
R377	1-247-867-00	CARBON	33K	5%	1/6W	
R378	1-247-855-00	CARBON	10K	5%	1/6W	
R379	1-247-887-00	CARBON	220K	5%	1/6W	
R380	1-247-879-00	CARBON	100K	5%	1/6W	
R381	1-247-879-00	CARBON	100K	5%	1/6W	
R382	1-247-867-00	CARBON	33K	5%	1/6W	
R383	1-247-879-00	CARBON	100K	5%	1/6W	
R384	1-247-879-00	CARBON	100K	5%	1/6W	
R385	1-247-883-00	CARBON	150K	5%	1/6W	
R386	1-247-883-00	CARBON	150K	5%	1/6W	
R387	1-247-871-00	CARBON	47K	5%	1/6W	
R388	1-247-867-00	CARBON	33K	5%	1/6W	
R389	1-247-867-00	CARBON	33K	5%	1/6W	
R390	1-247-868-00	CARBON	36K	5%	1/6W	
R391	1-247-866-00	CARBON	30K	5%	1/6W	
R392	1-247-832-00	CARBON	1.1K	5%	1/6W	
R393	1-247-857-00	CARBON	12K	5%	1/6W	
R394	1-247-897-00	CARBON	560K	5%	1/6W	
R395	1-247-847-00	CARBON	4.7K	5%	1/6W	
R396	1-247-867-00	CARBON	33K	5%	1/6W	
R398	1-247-871-00	CARBON	47K	5%	1/6W	
R399	1-247-847-00	CARBON	4.7K	5%	1/6W	
R400	1-247-823-00	CARBON	470	5%	1/6W	
R401	⚠.1-212-360-00	METAL OXIDE	1	5%	1W	F
R402	⚠.1-246-981-00	CARBON	4.7	5%	1/8W	F
R403	1-247-831-00	CARBON	1K	5%	1/6W	
R404	1-247-871-00	CARBON	47K	5%	1/6W	
R405	1-247-855-00	CARBON	10K	5%	1/6W	
R406	1-247-871-00	CARBON	47K	5%	1/6W	
R407	1-247-855-00	CARBON	10K	5%	1/6W	
R408	1-247-879-00	CARBON	100K	5%	1/6W	
R410	1-247-831-00	CARBON	1K	5%	1/6W	
R413	1-247-859-00	CARBON	15K	5%	1/6W	
R414	1-247-850-00	CARBON	6.2K	5%	1/6W	
R415	1-247-863-00	CARBON	22K	5%	1/6W	
R416	1-247-871-00	CARBON	47K	5%	1/6W	
R417	1-247-855-00	CARBON	10K	5%	1/6W	
R419	1-247-871-00	CARBON	47K	5%	1/6W	
R420	⚠.1-212-366-00	METAL OXIDE	3.3	5%	1W	F
R421	1-247-871-00	CARBON	47K	5%	1/6W	
R422	1-247-871-00	CARBON	47K	5%	1/6W	
R423	1-247-855-00	CARBON	10K	5%	1/6W	
R424	1-247-871-00	CARBON	47K	5%	1/6W	
R425	1-247-855-00	CARBON	10K	5%	1/6W	
R426	1-247-863-00	CARBON	22K	5%	1/6W	
R427	1-247-863-00	CARBON	22K	5%	1/6W	
R428	1-244-865-00	CARBON	470	5%	1/2W	
R429	1-247-849-00	CARBON	5.6K	5%	1/6W	
R430	1-247-831-00	CARBON	1K	5%	1/6W	
R431	⚠.1-212-360-00	METAL OXIDE	1	5%	1W	F
R432	1-247-849-00	CARBON	5.6K	5%	1/6W	
R433	1-247-831-00	CARBON	1K	5%	1/6W	
R434	1-244-865-00	CARBON	470	5%	1/2W	
R435	1-247-863-00	CARBON	22K	5%	1/6W	
R436	1-247-863-00	CARBON	22K	5%	1/6W	
R437	1-247-871-00	CARBON	47K	5%	1/6W	
R438	1-247-855-00	CARBON	10K	5%	1/6W	
R439	1-247-903-00	CARBON	1M	5%	1/6W	
R440	1-247-855-00	CARBON	10K	5%	1/6W	
R441	1-247-903-00	CARBON	1M	5%	1/6W	
R442	1-247-871-00	CARBON	47K	5%	1/6W	
R443	1-247-855-00	CARBON	10K	5%	1/6W	
R444	1-247-871-00	CARBON	47K	5%	1/6W	
R448	1-247-873-00	CARBON	56K	5%	1/6W	
R449	1-247-897-00	CARBON	560K	5%	1/6W	
R451	1-247-871-00	CARBON	47K	5%	1/6W	
R454	1-247-857-00	CARBON	12K	5%	1/6W	
R455	1-247-845-00	CARBON	3.9K	5%	1/6W	
R456	1-247-871-00	CARBON	47K	5%	1/6W	
R457	⚠.1-246-981-00	CARBON	4.7	5%	1/8W	F
R458	1-247-825-00	CARBON	560	5%	1/6W	
R459	1-247-837-00	CARBON	1.8K	5%	1/6W	
R460	1-247-843-00	CARBON	3.3K	5%	1/6W	
R461	1-247-871-00	CARBON	47K	5%	1/6W	
R462	1-247-855-00	CARBON	10K	5%	1/6W	
R466	1-247-871-00	CARBON	47K	5%	1/6W	
R467	1-247-871-00	CARBON	47K	5%	1/6W	
R468	1-247-871-00	CARBON	47K	5%	1/6W	
R469	1-247-839-00	CARBON	2.2K	5%	1/6W	
R470	1-247-839-00	CARBON	2.2K	5%	1/6W	
R473	1-247-855-00	CARBON	10K	5%	1/6W	
R474	⚠.1-212-857-00	FUSIBLE	10	5%	1/4W	F
R475	1-247-819-00	CARBON	330	5%	1/6W	
R476	1-247-871-00	CARBON	47K	5%	1/6W	
R477	1-247-847-00	CARBON	4.7K	5%	1/6W	
R478	1-246-469-00	CARBON	680	5%	1/4W	
R479	1-247-847-00	CARBON	4.7K	5%	1/6W	
R480	1-247-795-00	CARBON	33	5%	1/6W	
R481	1-247-808-00	CARBON	110	5%	1/6W	
R482	1-247-871-00	CARBON	47K	5%	1/6W	
R483	1-247-855-00	CARBON	10K	5%	1/6W	
R484	1-247-855-00	CARBON	10K	5%	1/6W	
R485	1-247-821-00	CARBON	390	5%	1/6W	
R492	1-247-853-00	CARBON	8.2K	5%	1/6W	
R493	1-247-871-00	CARBON	47K	5%	1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

SS-16

Ref.No.	Part No.	Description				Remark
R494	1-247-875-00	CARBON	68K	5%	1/6W	
R495	1-247-855-00	CARBON	10K	5%	1/6W	
R496	1-247-873-00	CARBON	56K	5%	1/6W	
R497	1-247-869-00	CARBON	39K	5%	1/6W	
R498	1-247-808-00	CARBON	110	5%	1/6W	
R499	1-247-831-00	CARBON	1K	5%	1/6W	
R500	1-247-871-00	CARBON	47K	5%	1/6W	
R501	1-247-855-00	CARBON	10K	5%	1/6W	
R502	1-247-855-00	CARBON	10K	5%	1/6W	
R503	1-247-831-00	CARBON	1K	5%	1/6W	
R504	1-247-871-00	CARBON	47K	5%	1/6W	
R505	1-247-855-00	CARBON	10K	5%	1/6W	
R506	1-247-863-00	CARBON	22K	5%	1/6W	
R507	1-247-871-00	CARBON	47K	5%	1/6W	
R508	1-247-871-00	CARBON	47K	5%	1/6W	
R509	1-247-871-00	CARBON	47K	5%	1/6W	
R511	1-247-863-00	CARBON	22K	5%	1/6W	
R512	1-246-467-00	CARBON	560	5%	1/4W	
R513	1-246-470-00	CARBON	750	5%	1/4W	
R514	1-247-871-00	CARBON	47K	5%	1/6W	
R516	1-247-845-00	CARBON	3.9K	5%	1/6W	
R518	1-247-863-00	CARBON	22K	5%	1/6W	
R519	1-247-855-00	CARBON	10K	5%	1/6W	
R520	1-247-871-00	CARBON	47K	5%	1/6W	
R521	1-247-879-00	CARBON	100K	5%	1/6W	
R522	1-247-857-00	CARBON	12K	5%	1/6W	
R523	1-247-855-00	CARBON	10K	5%	1/6W	
R524	1-247-842-00	CARBON	3K	5%	1/6W	
R525	1-247-855-00	CARBON	10K	5%	1/6W	
R527	1-247-863-00	CARBON	22K	5%	1/6W	
R528	1-247-871-00	CARBON	47K	5%	1/6W	
R555	1-247-880-00	CARBON	110K	5%	1/6W	
R557	1-247-871-00	CARBON	47K	5%	1/6W	
R559	1-247-865-00	CARBON	27K	5%	1/6W	
R610	1-247-817-00	CARBON	270	5%	1/6W	
R611	1-247-831-00	CARBON	1K	5%	1/6W	
R612	1-247-871-00	CARBON	47K	5%	1/6W	
R613	1-247-886-00	CARBON	200K	5%	1/6W	
R614	1-247-841-00	CARBON	2.7K	5%	1/6W	
R615	1-247-869-00	CARBON	39K	5%	1/6W	
R616	1-247-841-00	CARBON	2.7K	5%	1/6W	
R617	1-247-867-00	CARBON	33K	5%	1/6W	
R618	1-247-863-00	CARBON	22K	5%	1/6W	
R619	1-247-849-00	CARBON	5.6K	5%	1/6W	
R620	1-247-879-00	CARBON	100K	5%	1/6W	
R621	1-247-815-00	CARBON	220	5%	1/6W	
R622	1-247-875-00	CARBON	68K	5%	1/6W	
R623	1-247-831-00	CARBON	1K	5%	1/6W	
R624	1-247-801-00	CARBON	56	5%	1/6W	
R625	1-247-852-00	CARBON	7.5K	5%	1/6W	
R627	1-247-847-00	CARBON	4.7K	5%	1/6W	
R628	1-247-871-00	CARBON	47K	5%	1/6W	
R629	1-247-849-00	CARBON	5.6K	5%	1/6W	
R630	1-247-871-00	CARBON	47K	5%	1/6W	
R631	1-247-895-00	CARBON	470K	5%	1/6W	
R632	1-247-875-00	CARBON	68K	5%	1/6W	
R633	1-247-831-00	CARBON	1K	5%	1/6W	
R634	1-247-879-00	CARBON	100K	5%	1/6W	
R635	1-247-871-00	CARBON	47K	5%	1/6W	
R636	1-247-871-00	CARBON	47K	5%	1/6W	
R637	1-247-827-00	CARBON	680	5%	1/6W	
R638	1-247-831-00	CARBON	1K	5%	1/6W	
R639	1-247-831-00	CARBON	1K	5%	1/6W	
R640	1-247-831-00	CARBON	1K	5%	1/6W	
R641	1-247-831-00	CARBON	1K	5%	1/6W	
R642	1-247-871-00	CARBON	47K	5%	1/6W	
R643	1-247-871-00	CARBON	47K	5%	1/6W	
R644	1-247-855-00	CARBON	10K	5%	1/6W	
R645	1-247-871-00	CARBON	47K	5%	1/6W	
R647	1-247-871-00	CARBON	47K	5%	1/6W	
R648	1-247-855-00	CARBON	10K	5%	1/6W	
R649	1-247-855-00	CARBON	10K	5%	1/6W	
R650	1-247-871-00	CARBON	47K	5%	1/6W	
R652	1-247-871-00	CARBON	47K	5%	1/6W	
R653	1-247-855-00	CARBON	10K	5%	1/6W	
R654	1-247-855-00	CARBON	10K	5%	1/6W	
R655	1-247-871-00	CARBON	47K	5%	1/6W	
R656	1-247-863-00	CARBON	22K	5%	1/6W	
R657	1-247-855-00	CARBON	10K	5%	1/6W	
R658	1-247-871-00	CARBON	47K	5%	1/6W	
R659	1-247-865-00	CARBON	27K	5%	1/6W	
R660	1-247-863-00	CARBON	22K	5%	1/6W	
R661	1-247-809-00	CARBON	120	5%	1/6W	
R662	1-247-829-00	CARBON	820	5%	1/6W	
R663	1-247-843-00	CARBON	3.3K	5%	1/6W	
R664	1-247-849-00	CARBON	5.6K	5%	1/6W	
R665	1-247-873-00	CARBON	56K	5%	1/6W	
R666	1-247-807-00	CARBON	100	5%	1/6W	
R667	1-247-855-00	CARBON	10K	5%	1/6W	
R672	1-247-831-00	CARBON	1K	5%	1/6W	
R673	1-247-831-00	CARBON	1K	5%	1/6W	
R674	1-247-831-00	CARBON	1K	5%	1/6W	
R675	1-247-831-00	CARBON	1K	5%	1/6W	
R676	1-247-831-00	CARBON	1K	5%	1/6W	
R677	1-247-831-00	CARBON	1K	5%	1/6W	
R677	1-247-831-00	CARBON	1K	5%	1/6W	
R678	1-247-855-00	CARBON	10K	5%	1/6W	
R679	1-247-871-00	CARBON	47K	5%	1/6W	
R681	1-247-831-00	CARBON	1K	5%	1/6W	
R682	1-247-831-00	CARBON	1K	5%	1/6W	
R683	1-247-871-00	CARBON	47K	5%	1/6W	
R690	1-247-855-00	CARBON	10K	5%	1/6W	
R691	1-247-855-00	CARBON	10K	5%	1/6W	
R692	1-247-855-00	CARBON	10K	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
R693	1-247-855-00	CARBON	10K	5%	1/6W	
R694	1-247-855-00	CARBON	10K	5%	1/6W	
R695	1-247-855-00	CARBON	10K	5%	1/6W	
R701	1-247-846-00	CARBON	4.3K	5%	1/6W	
R702	1-247-855-00	CARBON	10K	5%	1/6W	
R703	1-247-871-00	CARBON	47K	5%	1/6W	
R704	1-247-839-00	CARBON	2.2K	5%	1/6W	
R705	1-247-839-00	CARBON	2.2K	5%	1/6W	
R706	1-247-839-00	CARBON	2.2K	5%	1/6W	
R707	1-247-839-00	CARBON	2.2K	5%	1/6W	
R708	1-247-839-00	CARBON	2.2K	5%	1/6W	
R709	1-247-839-00	CARBON	2.2K	5%	1/6W	
R801	1-247-847-00	CARBON	4.7K	5%	1/6W	
R802	1-247-831-00	CARBON	1K	5%	1/6W	
R803	1-247-839-00	CARBON	2.2K	5%	1/6W	
R804	1-247-871-00	CARBON	47K	5%	1/6W	
R851	1-247-855-00	CARBON	10K	5%	1/6W	
R853	1-247-863-00	CARBON	22K	5%	1/6W	
R854	1-247-855-00	CARBON	10K	5%	1/6W	
R855	1-247-871-00	CARBON	47K	5%	1/6W	
R856	1-247-855-00	CARBON	10K	5%	1/6W	
R857	1-247-871-00	CARBON	47K	5%	1/6W	
R858	1-247-863-00	CARBON	22K	5%	1/6W	
R859	1-247-863-00	CARBON	22K	5%	1/6W	
R860	1-247-865-00	CARBON	27K	5%	1/6W	
R861	1-247-859-00	CARBON	15K	5%	1/6W	

VARIABLE RESISTOR

Ref.No.	Part No.	Description
RV301	1-228-750-00	RES, ADJ, CARBON 47K
RV302	1-228-750-00	RES, ADJ, CARBON 47K
RV303	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV304	1-228-750-00	RES, ADJ, CARBON 47K
RV307	1-228-994-00	RES, ADJ, METAL GLAZE 10K
RV308	1-228-994-00	RES, ADJ, METAL GLAZE 10K
RV309	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV310	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K

THERMISTOR

Ref.No.	Part No.	Description
TH302	1-800-202-XX	THERMISTOR S-10K
TH303	1-800-200-00	THERMISTOR S-3K
TH304	1-800-202-XX	THERMISTOR S-10K
TH305	1-800-202-XX	THERMISTOR S-10K

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♠:1-610-806-00 FU-15 BOARD
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Ref.No.	Part No.	Description
	♠:3-670-095-00	HOLDER, LED
	♠:3-674-313-00	COVER, LED
	♠:3-674-372-00	HOLDER (A), LED

DIODE

Ref.No.	Part No.	Description
D701	8-719-812-30	DIODE TL0123
D702	8-719-812-32	DIODE TLY123
D703	8-719-812-32	DIODE TLY123
D704	8-719-812-33	DIODE TLG123A
D705	8-719-812-30	DIODE TL0123
D706	8-719-812-33	DIODE TLG123A

RESISTOR

Ref.No.	Part No.	Description				Remark
R701	1-247-817-00	CARBON	270	5%	1/6W	
R702	1-247-817-00	CARBON	270	5%	1/6W	
R703	1-247-811-00	CARBON	150	5%	1/6W	
R704	1-247-811-00	CARBON	150	5%	1/6W	

SWITCH

Ref.No.	Part No.	Description
S701	1-553-997-00	SWITCH, KEY BOARD
S702	1-553-997-00	SWITCH, KEY BOARD
S703	1-553-997-00	SWITCH, KEY BOARD
S704	1-553-997-00	SWITCH, KEY BOARD
S705	1-553-997-00	SWITCH, KEY BOARD
S706	1-553-997-00	SWITCH, KEY BOARD
S707	1-553-997-00	SWITCH, KEY BOARD

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♠:A-6721-168-A TU-39 BOARD, COMPLETE
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Ref.No.	Part No.	Description
	1-230-134-00	PRESET UNIT (12CH)
	♠:3-681-175-00	LID, UPPER, SHIELD CASE, TU
	♠:3-681-176-00	LID, BOTTOM, SHIELD CASE, TU
	♠:3-681-183-00	CASE (MAIN), SHIELD, TU
	♠:4-336-029-00	PLATE, SHIELD

CAPACITOR

Ref.No.	Part No.	Description				Remark
C001	1-123-356-00	ELECT	10MF	20%	16V	
C002	1-161-032-00	CERAMIC	0.01MF	20%	25V	
C003	1-161-032-00	CERAMIC	0.01MF	20%	25V	
C004	1-123-356-00	ELECT	10MF	20%	16V	
C005	1-161-075-51	CERAMIC	0.068MF	20%	50V	
C007	1-102-529-00	CERAMIC	100PF	5%	50V	
C008	1-102-527-00	CERAMIC	82PF	5%	50V	
C009	1-102-943-00	CERAMIC	6PF	0.5PF	50V	
C010	1-102-523-00	CERAMIC	56PF	5%	50V	
C011	1-102-529-00	CERAMIC	100PF	5%	50V	
C012	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C013	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C014	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C015	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C016	1-101-004-00	CERAMIC	0.01MF		50V	
C017	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C018	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C019	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C020	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C021	1-123-328-00	ELECT	4.7MF	20%	25V	
C022	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C023	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C024	1-102-518-00	CERAMIC	33PF	5%	50V	
C025	1-102-529-00	CERAMIC	100PF	5%	50V	
C026	1-102-941-00	CERAMIC	4PF	0.5PF	50V	
C027	1-102-941-00	CERAMIC	4PF	0.5PF	50V	
C028	1-102-518-00	CERAMIC	33PF	5%	50V	
C029	1-102-527-00	CERAMIC	82PF	5%	50V	

When indicating parts by reference number, please include the board name.

TU-39

Ref.No.	Part No.	Description			Remark
C030	1-123-356-00	ELECT	10MF	20%	16V
C031	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C032	1-161-032-00	CERAMIC	0.01MF	20%	25V
C033	1-123-380-00	ELECT	1MF	20%	50V
C034	1-123-318-00	ELECT	33MF	20%	16V
C035	1-101-004-00	CERAMIC	0.01MF		50V
C039	1-102-959-00	CERAMIC	22PF	5%	50V
C040	1-102-959-00	CERAMIC	22PF	5%	50V
C041	1-161-032-00	CERAMIC	0.01MF	20%	25V
C042	1-161-032-00	CERAMIC	0.01MF	20%	25V
C044	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C045	1-102-959-00	CERAMIC	22PF	5%	50V
C046	1-101-004-00	CERAMIC	0.01MF		50V
C047	1-123-318-00	ELECT	33MF	20%	16V
C048	1-161-032-00	CERAMIC	0.01MF	20%	25V
C049	1-123-380-00	ELECT	1MF	20%	50V
C050	1-123-356-00	ELECT	10MF	20%	50V
C051	1-123-379-00	ELECT	0.47MF	20%	50V
C052	1-101-004-00	CERAMIC	0.01MF		50V
C053	1-123-356-00	ELECT	10MF	20%	50V
C054	1-131-415-00	ELECT(SOLID)	0.68MF	10%	16V
C055	1-123-356-00	ELECT	10MF	20%	16V
C056	1-123-356-00	ELECT	10MF	20%	16V
C057	1-123-356-00	ELECT	10MF	20%	16V
C058	1-123-356-00	ELECT	10MF	20%	16V
C059	1-123-356-00	ELECT	10MF	20%	16V

CERAMIC DISCRIMINATOR

CD001	1-404-380-00	DISCRIMINATOR, CERAMIC 5.5MHZ

FILTER

CF001	1-527-263-00	CERAMIC FILTER (5.5MHZ)

CONNECTOR

CN001	♠:1-560-892-00	PIN, CONNECTOR 4P
CN002	♠:1-560-894-00	PIN, CONNECTOR 6P
CN003	♠:1-560-895-00	PIN, CONNECTOR 7P
CN004	♠:1-560-892-00	PIN, CONNECTOR 4P
CN005	♠:1-560-893-00	PIN, CONNECTOR 5P
CN006	♠:1-560-899-00	PIN, CONNECTOR 11P

TRIMMER

CT001	1-404-134-00	TRAP, CERAMIC (5.5MHZ)

DIODE

D001	8-719-911-19	DIODE 1SS119
D002	8-719-911-19	DIODE 1SS119
D005	8-719-911-19	DIODE 1SS119
D006	=>8-719-101-83	DIODE RD12EL2
D007	8-719-901-33	DIODE 1SS133
D008	8-719-901-33	DIODE 1SS133

Ref.No.	Part No.	Description	Remark
D009	8-719-901-33	DIODE 1SS133	
D010	8-719-901-33	DIODE 1SS133	
D011	8-719-901-33	DIODE 1SS133	
D012	8-719-901-33	DIODE 1SS133	
D013	8-719-901-33	DIODE 1SS133	
D014	8-719-901-33	DIODE 1SS133	
D015	8-719-901-33	DIODE 1SS133	
D016	8-719-901-33	DIODE 1SS133	
D017	8-719-901-33	DIODE 1SS133	
D018	8-719-901-33	DIODE 1SS133	
D019	8-719-911-19	DIODE 1SS119	
D020	8-719-911-19	DIODE 1SS119	
D021	8-719-911-19	DIODE 1SS119	
D022	8-719-911-19	DIODE 1SS119	
D023	8-719-911-19	DIODE 1SS119	
D024	8-719-911-19	DIODE 1SS119	
D025	8-719-911-19	DIODE 1SS119	
D026	8-719-911-19	DIODE 1SS119	
D027	8-719-911-19	DIODE 1SS119	
D028	8-719-911-19	DIODE 1SS119	
D029	8-719-911-19	DIODE 1SS119	
D030	8-719-911-19	DIODE 1SS119	
D032	8-719-911-19	DIODE 1SS119	
D033	8-719-911-19	DIODE 1SS119	
D034	8-719-911-19	DIODE 1SS119	
D035	8-719-911-19	DIODE 1SS119	
D036	8-719-911-19	DIODE 1SS119	
D037	8-719-911-19	DIODE 1SS119	
D038	8-719-911-19	DIODE 1SS119	
D039	8-719-911-19	DIODE 1SS119	
D040	8-719-911-19	DIODE 1SS119	
D041	8-719-911-19	DIODE 1SS119	
D042	8-719-911-19	DIODE 1SS119	
D043	8-719-911-19	DIODE 1SS119	

IC

IC001	8-759-276-07	IC TA7607AP
IC002	8-759-193-91	IC UPC1391H
IC003	8-759-600-44	IC M54836AP
IC004	8-759-157-40	IC UPC574J

COIL

L001	1-407-681-00	MICRO INDUCTOR 1UH
L002	1-407-690-00	MICRO INDUCTOR 5.6UH
L003	1-408-406-00	MICRO INDUCTOR 5.6UH
	1-408-600-00	MICRO INDUCTOR 5.6UH
L004	1-408-423-00	MICRO INDUCTOR 150UH
	1-408-617-00	MICRO INDUCTOR 150UH
L005	1-408-409-00	MICRO INDUCTOR 10UH
L007	1-408-412-00	MICRO INDUCTOR 18UH
L008	1-408-413-00	MICRO INDUCTOR 22UH
	1-408-607-00	MICRO INDUCTOR 22UH

When indicating parts by reference number, please include the board name.

TRANSISTOR

Ref.No.	Part No.	Description	Remark
Q001	8-765-300-00	TRANSISTOR 2SC2009	
Q002	8-769-200-20	TRANSISTOR 2SK107-2	
Q003	=>8-729-245-83	TRANSISTOR 2SC2458	
Q007	=>8-729-245-83	TRANSISTOR 2SC2458	
Q008	=>8-729-988-12	TRANSISTOR 2SA881	
Q009	=>8-729-117-54	TRANSISTOR 2SA1175	
Q010	=>8-729-117-54	TRANSISTOR 2SA1175	
Q011	=>8-729-117-54	TRANSISTOR 2SA1175	
Q013	=>8-729-245-83	TRANSISTOR 2SC2458	
Q014	8-769-200-20	TRANSISTOR 2SK107-2	
Q016	=>8-729-245-83	TRANSISTOR 2SC2458	
Q017	=>8-729-245-83	TRANSISTOR 2SC2458	
Q018	=>8-729-245-83	TRANSISTOR 2SC2458	
Q019	=>8-729-204-83	TRANSISTOR 2SA1048-GR	

RESISTOR

Ref.No.	Part No.	Description	Remark
R001	1-247-871-00	CARBON 47K 5% 1/6W	
R002	1-247-847-00	CARBON 4.7K 5% 1/6W	
R003	1-247-831-00	CARBON 1K 5% 1/6W	
R004	1-247-847-00	CARBON 4.7K 5% 1/6W	
R005	1-247-845-00	CARBON 3.9K 5% 1/6W	
R006	1-247-815-00	CARBON 220 5% 1/6W	
R007	1-247-815-00	CARBON 220 5% 1/6W	
R008	1-247-823-00	CARBON 470 5% 1/6W	
R009	1-247-837-00	CARBON 1.8K 5% 1/6W	
R010	1-247-831-00	CARBON 1K 5% 1/6W	
R011	1-247-841-00	CARBON 2.7K 5% 1/6W	
R012	1-247-835-00	CARBON 1.5K 5% 1/6W	
R013	1-247-863-00	CARBON 22K 5% 1/6W	
R014	1-247-877-00	CARBON 82K 5% 1/6W	
R015	1-247-867-00	CARBON 33K 5% 1/6W	
R016	1-247-901-00	CARBON 820K 5% 1/6W	
R017	1-247-831-00	CARBON 1K 5% 1/6W	
R018	1-247-813-00	CARBON 180 5% 1/6W	
R019	1-247-807-00	CARBON 100 5% 1/6W	
R020	1-247-823-00	CARBON 470 5% 1/6W	
R021	1-247-820-00	CARBON 360 5% 1/6W	
R028	1-247-831-00	CARBON 1K 5% 1/6W	
R029	1-247-831-00	CARBON 1K 5% 1/6W	
R030	1-247-847-00	CARBON 4.7K 5% 1/6W	
R031	1-247-817-00	CARBON 270 5% 1/6W	
R032	1-247-821-00	CARBON 390 5% 1/6W	
R035	1-247-841-00	CARBON 2.7K 5% 1/6W	
R036	1-247-865-00	CARBON 27K 5% 1/6W	
R039	1-247-879-00	CARBON 100K 5% 1/6W	
R040	1-247-855-00	CARBON 10K 5% 1/6W	
R041	1-247-855-00	CARBON 10K 5% 1/6W	
R042	1-247-855-00	CARBON 10K 5% 1/6W	
R043	1-247-855-00	CARBON 10K 5% 1/6W	
R044	1-247-855-00	CARBON 10K 5% 1/6W	
R045	1-247-855-00	CARBON 10K 5% 1/6W	
R049	1-247-855-00	CARBON 10K 5% 1/6W	
R050	1-247-895-00	CARBON 470K 5% 1/6W	
R052	1-247-897-00	CARBON 560K 5% 1/6W	
R053	1-247-883-00	CARBON 150K 5% 1/6W	
R054	1-247-883-00	CARBON 150K 5% 1/6W	
R055	1-247-867-00	CARBON 33K 5% 1/6W	
R056	1-247-871-00	CARBON 47K 5% 1/6W	
R057	1-247-871-00	CARBON 47K 5% 1/6W	
R058	1-247-895-00	CARBON 470K 5% 1/6W	
R059	⚠ 1-206-670-00	METAL OXIDE 1.8K 5% 2W	F
R060	1-247-875-00	CARBON 68K 5% 1/6W	
R061	1-247-839-00	CARBON 2.2K 5% 1/6W	
R062	1-247-831-00	CARBON 1K 5% 1/6W	
R063	1-247-881-00	CARBON 120K 5% 1/6W	
R064	1-247-863-00	CARBON 22K 5% 1/6W	
R065	1-247-863-00	CARBON 22K 5% 1/6W	
R066	1-247-863-00	CARBON 22K 5% 1/6W	
R067	1-247-863-00	CARBON 22K 5% 1/6W	
R068	1-247-863-00	CARBON 22K 5% 1/6W	
R069	1-247-863-00	CARBON 22K 5% 1/6W	
R070	1-247-863-00	CARBON 22K 5% 1/6W	
R071	1-247-855-00	CARBON 10K 5% 1/6W	
R072	1-247-863-00	CARBON 22K 5% 1/6W	
R073	⚠ 1-212-849-00	FUSIBLE 4.7 5% 1/4W	F
R074	1-247-871-00	CARBON 47K 5% 1/6W	
R076	1-247-863-00	CARBON 22K 5% 1/6W	
R077	1-247-871-00	CARBON 47K 5% 1/6W	
R078	1-247-875-00	CARBON 68K 5% 1/6W	
R079	1-247-879-00	CARBON 100K 5% 1/6W	
R080	1-247-895-00	CARBON 470K 5% 1/6W	
R081	1-247-855-00	CARBON 10K 5% 1/6W	
R082	1-247-839-00	CARBON 2.2K 5% 1/6W	

VARIABLE RESISTOR

Ref.No.	Part No.	Description	Remark
RV001	1-228-747-00	RES, ADJ, CARBON 4.7K	
RV002	1-228-753-00	RES, ADJ, CARBON 470K	

SWITCH

Ref.No.	Part No.	Description	Remark
S001	1-516-226-00	SLIDE SWITCH	
S002	1-554-373-00	SWITCH, LEVER	

FILTER

Ref.No.	Part No.	Description	Remark
SF001	1-404-433-00	SAWF	

TRANSFORMER

Ref.No.	Part No.	Description	Remark
T001	1-404-068-00	COIL, VIF	
T002	1-404-068-00	COIL, VIF	
T003	1-404-207-00	COIL, VIF	
T004	1-404-203-00	COIL, VIF	
T005	1-404-203-00	COIL, VIF	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

MT-4 CS-3 CS-4 LM-8 RD-6 TM-40

Ref.No.	Part No.	Description	Remark
	♦:1-610-400-00	MT-4 BOARD **********	
	⚠.1-463-350-00	TUNER (BT-881)	

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Ref.No.	Part No.	Description	Remark
	♦:1-609-227-00	CS-3 BOARD **********	
		CONNECTOR	
CN301	♦:1-564-029-00	PIN, CONNECTOR 4P	
		SWITCH	
S301	1-554-241-00	SWITCH, LEVER	

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Ref.No.	Part No.	Description	Remark
	♦:1-609-228-00	CS-4 BOARD **********	
		SWITCH	
S302	1-554-241-00	SWITCH, LEVER	

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Ref.No.	Part No.	Description	Remark
	♦:1-605-071-00	LM-8 BOARD **********	
		CAPACITOR	
C101	1-161-057-00	CERAMIC 0.033MF 10% 50V	
C102	1-161-057-00	CERAMIC 0.033MF 10% 50V	
		COIL	
L101	1-408-120-00	MICRO INDUCTOR 18UH	
L102	1-408-120-00	MICRO INDUCTOR 18UH	
		RESISTOR	
R101	1-206-479-00	METAL OXIDE 47 5% 2W	F

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Ref.No.	Part No.	Description	Remark
	♦:1-610-401-00	RD-6 BOARD **********	
	♦:3-681-157-00	HOLDER, RD	
		DIODE	
D001	8-719-921-03	DIODE GP-2S02A	

Ref.No.	Part No.	Description	Remark
	♦:1-610-402-00	RD-7 BOARD **********	
		DIODE	
D001	8-719-921-03	DIODE GP-2S02A	

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Ref.No.	Part No.	Description	Remark
	♦:1-610-804-00	TM-40 BOARD ***********	
	♦:3-682-424-00	HOLDER, TUBE, INDICATION	
	7-685-133-11	SCREW +P 2.6X6 TYPE1	
		DIODE	
D102	8-719-812-31	DIODE TLR123	
D103	8-719-812-31	DIODE TLR123	
		INDICATOR TUBE	
FL101	1-519-303-00	INDICATOR TUBE, FLUORESCENT	
		RESISTOR	
R101	1-247-819-00	CARBON 330 5% 1/6W	
		VARIABLE RESISTOR	
RV601	1-230-122-00	RES, VAR, CARBON 100K	
		SWITCH	
S101	1-553-997-00	SWITCH, KEY BOARD	
S102	1-553-997-00	SWITCH, KEY BOARD	
S103	1-553-997-00	SWITCH, KEY BOARD	
S203	1-553-997-00	SWITCH, KEY BOARD	
S204	1-553-997-00	SWITCH, KEY BOARD	
S205	1-553-997-00	SWITCH, KEY BOARD	
S206	1-553-997-00	SWITCH, KEY BOARD	
S207	1-553-997-00	SWITCH, KEY BOARD	
S208	1-553-997-00	SWITCH, KEY BOARD	
S209	1-553-997-00	SWITCH, KEY BOARD	
S210	1-553-997-00	SWITCH, KEY BOARD	
S211	1-553-997-00	SWITCH, KEY BOARD	
S501	1-553-997-00	SWITCH, KEY BOARD	
S502	1-553-997-00	SWITCH, KEY BOARD	
S503	1-553-997-00	SWITCH, KEY BOARD	
S504	1-553-997-00	SWITCH, KEY BOARD	
S505	1-553-997-00	SWITCH, KEY BOARD	
S506	1-553-997-00	SWITCH, KEY BOARD	
S507	1-553-997-00	SWITCH, KEY BOARD	
S508	1-553-997-00	SWITCH, KEY BOARD	
S509	1-553-997-00	SWITCH, KEY BOARD	
S510	1-553-997-00	SWITCH, KEY BOARD	
S511	1-553-997-00	SWITCH, KEY BOARD	
S512	1-553-997-00	SWITCH, KEY BOARD	
S611	1-554-377-00	SWITCH, SLIDE	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description				Remark
S612	1-554-377-00	SWITCH, SLIDE				

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●:1-610-805-00 TM-41 BOARD
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●:3-674-372-00 HOLDER (A), LED

CAPACITOR

C001	1-123-354-00	ELECT	3.3MF	20%	50V
C002	1-125-299-00	*************	47000MF		0
C004	1-102-959-00	CERAMIC	22PF	5%	50V
C005	1-123-318-00	ELECT	33MF	20%	16V
C006	1-123-342-00	ELECT	22MF	20%	35V
C007	1-161-024-00	CERAMIC	0.082MF	10%	25V
C008	1-161-025-00	CERAMIC	0.1MF	10%	25V
C009	1-161-021-00	CERAMIC	0.047MF	10%	50V
C011	1-161-025-00	CERAMIC	0.1MF	10%	25V

CONNECTOR

CN002	●:1-560-891-00	PIN, CONNECTOR 3P
CN004	●:1-560-895-00	PIN, CONNECTOR 7P
CN007	●:1-564-027-00	PIN, CONNECTOR 2P

DIODE

D001	8-719-911-19	DIODE 1SS119
D002	8-719-191-07	DIODE RD9.1E-B
D005	8-719-812-31	DIODE TLR123
D006	8-719-911-19	DIODE 1SS119
D007	8-719-911-19	DIODE 1SS119
D008	8-719-911-19	DIODE 1SS119
D009	8-719-911-19	DIODE 1SS119

IC

IC001	8-759-101-63	IC UPD7519G-033

TRANSISTOR

Q005	=>8-729-245-83	TRANSISTOR 2SC2458
Q006	=>8-729-245-83	TRANSISTOR 2SC2458
Q007	=>8-729-204-83	TRANSISTOR 2SA1048-GR

RESISTOR

R001	1-247-875-00	CARBON	68K	5%	1/6W
R004	1-247-903-00	CARBON	1M	5%	1/6W
R006	1-247-831-00	CARBON	1K	5%	1/6W
R007	1-247-879-00	CARBON	100K	5%	1/6W
R009	1-247-867-00	CARBON	33K	5%	1/6W
R010	1-247-867-00	CARBON	33K	5%	1/6W
R011	1-247-872-00	CARBON	51K	5%	1/6W
R012	1-247-843-00	CARBON	3.3K	5%	1/6W
R013	1-247-879-00	CARBON	100K	5%	1/6W
R014	1-247-879-00	CARBON	100K	5%	1/6W
R015	1-247-879-00	CARBON	100K	5%	1/6W
R016	1-247-879-00	CARBON	100K	5%	1/6W
R017	1-247-868-00	CARBON	36K	5%	1/6W
R018	1-247-886-00	CARBON	200K	5%	1/6W
R019	1-247-874-00	CARBON	62K	5%	1/6W
R020	1-247-869-00	CARBON	39K	5%	1/6W
R021	1-247-879-00	CARBON	100K	5%	1/6W
R022	1-247-855-00	CARBON	10K	5%	1/6W
R023	1-247-855-00	CARBON	10K	5%	1/6W
R024	1-247-855-00	CARBON	10K	5%	1/6W
R025	1-247-855-00	CARBON	10K	5%	1/6W
R026	1-247-855-00	CARBON	10K	5%	1/6W
R027	1-247-855-00	CARBON	10K	5%	1/6W
R028	1-247-855-00	CARBON	10K	5%	1/6W
R029	1-247-855-00	CARBON	10K	5%	1/6W
R030	1-247-855-00	CARBON	10K	5%	1/6W
R032	1-247-855-00	CARBON	10K	5%	1/6W

TRIMMER

TC001	1-141-022-11	CAP, TRIMMER, CERAMIC

POST PIN

TP001	●:3-846-049-11	PIN, LEAD
TP002	●:3-846-049-11	PIN, LEAD

CRYSTAL

X001	1-527-647-00	OSCILLATOR, CRYSTAL

****

●:1-610-409-00 PS-23 BOARD
****

1-533-162-00 HOLDER, FUSE

CAPACITOR

C401	⚠.1-130-710-00	FILM	0.1MF	20%	250V
C406	1-125-298-00	ELECT(BLOCK)	10000MF	20%	25V
C414	1-123-332-00	ELECT	47MF	20%	16V
C415	1-123-332-00	ELECT	47MF	20%	16V

CONNECTOR

CN403	●:1-560-891-00	PIN, CONNECTOR 3P
CN405	●:1-560-890-00	PIN, CONNECTOR 2P
CN407	●:1-560-890-00	PIN, CONNECTOR 2P

DIODE

D401	8-719-505-20	DIODE S5VB20

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

FUSE

Ref.No.	Part No.	Description	Remark
F401	⚠.1-532-203-11	FUSE, TIME-LAG T2A 250V	
F402	⚠.1-532-237-11	FUSE, TIME-LAG T3.15A 250V	

IC

Ref.No.	Part No.	Description	Remark
IC401	8-749-912-29	IC STR1229	

RESISTOR

Ref.No.	Part No.	Description	Remark
R411	1-247-823-00	CARBON 470 5% 1/6W	

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A-6728-831-A PS-22 BOARD, COMPLETE
****

Ref.No.	Part No.	Description	Remark
	1-533-162-00	HOLDER, FUSE	
	7-685-872-01	SCREW +BVTT 3X8 (S)	

CAPACITOR

Ref.No.	Part No.	Description	Remark
C308	1-123-325-00	ELECT 2200MF 20% 16V	
C309	1-123-377-00	ELECT 470MF 20% 63V	
C311	1-123-375-00	ELECT 220MF 20% 63V	
C316	1-123-330-00	ELECT 22MF 20% 16V	
C319	1-123-330-00	ELECT 22MF 20% 16V	
C320	1-123-330-00	ELECT 22MF 20% 16V	

CONNECTOR

Ref.No.	Part No.	Description	Remark
CN301	♠:1-560-893-00	PIN, CONNECTOR 5P	
CN302	♠:1-560-892-00	PIN, CONNECTOR 4P	
CN304	♠:1-560-895-00	PIN, CONNECTOR 7P	
CN308	♠:1-560-894-00	PIN, CONNECTOR 6P	
CN360	♠:1-560-891-00	PIN, CONNECTOR 3P	

DIODE

Ref.No.	Part No.	Description	Remark
D302	=>8-719-511-20	DIODE S1UB20	
D313	8-719-200-02	DIODE 10E-2	
D315	8-719-200-02	DIODE 10E-2	
D317	8-719-100-41	DIODE RD6.8EB2	
D318	8-719-100-44	DIODE RD7.5EB2	

FUSE

Ref.No.	Part No.	Description	Remark
F304	⚠.1-532-279-11	FUSE, TIME-LAG T500MMA 250V	
F306	⚠.1-532-279-11	FUSE, TIME-LAG T500MMA 250V	

TRANSISTOR

Ref.No.	Part No.	Description	Remark
Q301	=>8-729-316-16	TRANSISTOR 2SC1061	
Q302	8-729-178-54	TRANSISTOR 2SC2785	
Q303	8-729-178-54	TRANSISTOR 2SC2785	
Q306	8-729-178-54	TRANSISTOR 2SC2785	
Q307	=>8-729-316-16	TRANSISTOR 2SC1061	
Q308	=>8-729-316-16	TRANSISTOR 2SC1061	
Q309	8-729-178-54	TRANSISTOR 2SC2785	

RESISTOR

Ref.No.	Part No.	Description	Remark
R301	1-247-819-00	CARBON 330 5% 1/6W	
R302	1-247-842-00	CARBON 3K 5% 1/6W	
R303	1-247-862-00	CARBON 20K 5% 1/6W	
R304	1-247-831-00	CARBON 1K 5% 1/6W	
R305	1-247-847-00	CARBON 4.7K 5% 1/6W	
R306	1-247-857-00	CARBON 12K 5% 1/6W	
R308	⚠.1-213-144-00	METAL OXIDE 1.2K 5% 1W	F
R310	1-247-855-00	CARBON 10K 5% 1/6W	
R313	1-244-885-00	CARBON 3.3K 5% 1/2W	
R313	1-244-885-00	CARBON 3.3K 5% 1/2W	
R314	1-247-865-00	CARBON 27K 5% 1/6W	
R315	1-247-847-00	CARBON 4.7K 5% 1/6W	
R316	1-247-852-00	CARBON 7.5K 5% 1/6W	

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MISCELLANEOUS
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Ref.No.	Part No.	Description	Remark
	A-6761-060-A	ACE ASSY (AUDIO, AUDIO ERASE, CTL)	
	⚠.1-463-350-12	TUNER (BT-881)	
	⚠.1-464-270-11	BOOSTER, RF MODULATOR(RFU-808)	
	⚠.1-534-817-12	POWER CORD	
	1-541-163-00	MOTOR (LOADING MOTOR)	
	♠:1-556-934-00	CABLE, PIN	
	8-825-508-10	HEAD, FE (FULL ERASE)	
L901	1-464-249-21	SENSOR, S COIL	
L902	1-464-250-00	SENSOR, T COIL	
M902	8-838-048-00	MOTOR, DC (BHF-1908A) (CAPSTAN MOTOR)	
M903	♠:A-4910-021-A	R STATOR BOARD, COMPLETE (REEL MOTOR)	
M904	A-6737-118-A	MOTOR ASSY, L (LOADING MOTOR)	
PM901	⚠.1-454-348-31	SOLENOID, BRAKE PLUNGER	
PM902	⚠.1-454-349-21	SOLENOID, PLUNGER (PINCH)	
S901	1-554-374-00	SWITCH, LEVER (REC PROOF)	
S902	1-554-374-00	SWITCH, LEVER (CASSETTE IN)	
S903	1-553-539-00	SWITCH, MICRO (LOADING END)	
S904	1-553-718-00	SWITCH, MICRO (UNLOADING END)	
T901	⚠.1-447-614-11	TRANSFORMER, POWER	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

ACCESSORIES AND PACKING MATERIALS
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Part No.	Description	Remark
1-551-513-00	CABLE, COAXAL ASSY	
1-556-893-00	CORD ASSY, COAXIAL	
3-656-301-00	SCREWDRIVER, CONTROL	
3-681-190-00	SHEET (LARGE), PROTECTION	
3-682-430-00	INDIVIDUAL CARTON	
3-682-431-00	CUSHION (UPPER)	
3-682-432-00	CUSHION (LOWER)	
3-701-007-00	BAND, BINDING	
3-773-540-51	MANUAL, INSTRUCTION	

When indicating parts by reference number, please include the board name.